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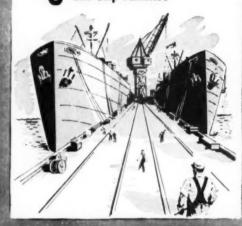
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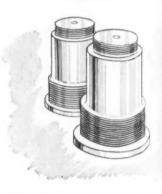
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In modern warfare there is no second prize. Only disaster can reward-the side that gets there with "too little" or "too late."

In production of America's fighting tools nothing is more essential than the uninterrupted and sufficient supply of industrial power from boilers, turbines, generators and engines.

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Now, in defense of all that Americans cherish, Hartford Steam Boiler recognizes its responsibility for seeing that, in the plants of its policyholders, vital war production shall not be "too little" or

"too late" because of preventable power equipment failure.



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THE HARTFORD STEAM BOILER INSPECTION AND INSURANCE COMPANY . Hartford, Connecticut

BUSINESS WEEK and The ANNALIST

WHERE TO FIND IT

Washington Bulletin
Figures of the Week
The Outlook
War Business Checklist
Production 50
New Products
The War-and Business Abroad 7
Marketing
Labor 9
Finance 98
The Trading Post
The Trend

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THE PICTURES

Cover—Harris & Ewing; 15—Acme (2), Press Assn; 17—Acme; 19—Cushing; 20—Robert Yarnall Richie; 24—National Housing Agency; 28—International News; 40—Wide World; 56—Tom Carew; 57—Wide World; 59—Acme; 62—International News; 76—Acme; 90—Harris & Ewing; 96—Acme.

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BUSINESS WEEK • OCTOBER 24 • NUMBER 88 (with which is combined The Annalist and the Magazine of Business). Published weekly by McGraw-Hill Publishing Company, Inc., James H. McGraw, Founder and Honorary Chairman. Publication office, 99–129 North Broadway, Albany, New York. EDITORIAL AND EXECUTIVE OFFICES, 330 W. 42ND ST., NEW YORK, N. Y. James H. McGraw, Jr., President; Howard Ehrlich, Executive Vice-President; Mason Briton, Vice-President; B. R. Putnam, Treasure; J. A. Gerardi, Secretary; J. E. Blackburn, Jr., Director of Circulation. Allow at least ten days for change of address. All communications about subscriptions should be addressed to the Director of Circulation, Business Week, 330 West 42nd Street, New York, N. Y. Subscription rates—United States, Mexico, and

Subscription rates—United States, Mexico, and Central and South American countries \$5.00 a year, \$8.00 two years, \$10.00 three years. Canada \$5.50 for one year, \$9.00 two years, \$11.00 for three years. Great Britain and British Possessions 45 shillings per year, 90 shillings three years. All other countries \$7.50 for one year, \$15.00 for three years. 20¢ per copy. Entered as second

class matter Decem-Post Office at Althe Act of March U. S. A. Copyright Graw-Hill Publishber 4, 1936 at the bany, N. Y., under 3, 1879. Printed in 1942 by the Moing Company, Inc.

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PUBLICATION

WASHINGTON BULLETIN

WHAT THE WASHINGTON NEWS MEANS TO MANAGEMENT

Hot Freeze

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49

59

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76 82

98

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Byrnes continues to make a good impression in his job as economic stabilizer. He's taking a tough, vigorous approach to his job. Nevertheless, it hasn't been tough or vigorous enough to enforce a quick resolution of the bitter last-ditch issues involved in working out concrete regulations to govern wages and salaries—which means deciding how nearly fixed they shall be.

The President himself bypassed this hot one when he issued an executive order that says, in essence, "There shall be a certain amount of stabilization."

Now it's sizzling in Byrnes lap.

• Byrnes Shows His Mettle — The Byrnes's toughness shows itself in little ways. In the crisp, decisive language of his first statement to the Economic Stabilization Board. In his clear warning to the board that, "If, after an adequate interchange of views, differences still persist, I shall resolve those differences." In Byrnes's cold displeasure when President William Green of the American Federation of Labor failed to show up for the first meeting of the ESB, sent A.F.L. spokesman Robert Watt in his stead—and ten minutes late.

Salaries First

But at midweek there were still no "freeze" regulations. Salary control is furthest along. Byrnes assigned Treasury the job of drafting regulations for the \$25,000 limit and for control of all salaries over \$3,000 not covered by wage agreements. Early this week Treasury submitted its proposals to Byrnes—so tightly guarded that even rumor-ridden Washington had no whisper of their contents.

White collar workers don't fight back. Wage workers do. Hence the National War Labor Board is still sweating over regulations for wages, salaries under \$3,000, and salaries up to \$5,000 when covered by wage agreements.

NWLB's hope that Byrnes would hand it a policy was blasted when he flatly ordered the board to draft its own. Now the star personnel—Davis, Taylor, Lapham, Ching, Watt, and Van Bittner—are concentrating on this job, leaving dispute settlement to the rest of the board.

• On the Sidelines—Secretary of Labor Perkins knows her bureaus are almost the only source for the professional labor-relations people the National War Labor Board will need for its coming expansion. Fearful lest the department be gutted, she's renewing her campaign to bring NWLB into Labor. On another front, she's playing along with union opposition to labor-draft legislation, hopeful that if the War Manpower Commission collapses the débris will fall her way.

Pressure on McNutt

The Byrnes influence is already being felt in the sluggish manpower situation. He has a double interest in manpower. On the one hand, wage freezing can accentuate harmful migration of labor, as in the copper country. On the other hand, labor shortages force up costs and

Byrnes's demand that McNutt submit a report on manpower has stirred the slow-moving War Manpower Commission to utilization of its existing power to give aid-short-of-law in averting or easing shortages. This trend is intensified by the Administration's evident intent to defer action on labor-draft legislation for some months.

U.S. Hiring Order Ready

Already the War Manpower Commission has extended its program of local, voluntary labor control from one to eleven areas (page 94). And on two fronts it's readying broader moves by which it can freeze labor in essential jobs and loosen it from nonessential jobs without employing coercion on the individual worker.

An order under the War Powers Act directing all employers to do their hiring through the U. S. Employment Service has been under discussion at WMC for months; a decision is imminent. This would practically end labor pirating.

"Essential" Redefined

A huge reservoir of labor can be freed by halting nonessential production, whether or not it uses critical materials. The stop-order on gold mining was one example. Movement of farmers away from subsistence land and discouragement of nonessential crops is being considered. And many manufacturing industries that have considered themselves safe because they use no scarce materials may feel the axe.

• Now We Know—One serious inhibition to action was removed when the Army finally agreed to content itself with 7,500,000 men next year. Nelson and McNutt have been fighting for months against grandiose schemes for up to 13,000,000 men, and the uncer-

tainty has stood in the way of solid planning. Another help is the program of furloughing skilled workers from the Army and sending them back to their jobs—started with 4,000 miner-soldiers this week.

Wage Precedent

Watch Byrnes's decision on the \$1-aday wage boost ordered by the National War Labor Board (employer members dissenting) for 10,000 Mountain States copper miners.

The order makes hash of the Little Steel pay-rise limitation formula. The board said that, in this case, getting the vital ore out was more important than inflation-control. The extra compensation is designed to attract miners back to the undermanned pits.

Stabilizer Byrnes will have to pass on the award under the rule that his O.K. is needed for every wage raise certain to raise a price ceiling. Whatever he decides will become a basic precedent on the question of whether manpower is to be channelized into essential industries by wage incentives or whether other devices must be found.

Seek Deferments Now

Employers who expect, when the time comes, to claim occupational deferment for certain of their employees will avoid difficulties by doing so immediately, without waiting until the men are called up. This includes essential men now deferred for dependency. Industrial employers use Form 42-A, others Form 42.

Georgia's George

When Congress wound up its fight over the 1942 revenue act this week, only one important participant remained with his temper unruffled and his dignity undamaged. He was Walter F. George (see cover), chairman of the Senate Finance Committee. More than any other man, either in Congress or in the Treasury, Senator George determined the main features of the new tax bill.

Both the House and the Treasury wanted to put most of the additional tax load on corporate incomes. Senator George stuck to the idea that individual incomes would have to furnish the major part of any extra revenue. In the end he won out, and the final bill accepts his principles (page 15). He wrote the 5% Victory Tax which will take \$3,600,000,000 out of individual incomes. And he sponsored the amend-

Another peace-time product that went to war



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This battery of kilns is calcining raw cement rock at one of the plants of the Lehigh Portland Cement Co. Such kilns are often over 250 feet long and more than 11 feet in diameter.



In these critical times no one can have a higher satisfaction than to feel useful.

If what we do, or what we make, can help the country win —that is our great reward.

Such is the nature of Lehigh's product that, though war came overnight, it was instantly ready for the drastic change from peace to war. For, cement makes concrete as readily for pill boxes as pavements; and very soon concrete made with Lehigh Cement was going into armament factories, air fields, camps, dry-docks, war construction of all kinds—both at home and over seas.

So many are the uses of concrete, so steady and undramatic is its performance, that in neither peace nor war does it get much notice—even though nothing can take its place. Yet, so versatile is this familiar concrete that it can,

and does, serve successfully in place of more "critical" material, such as steel.

Because Lehigh's cement plants—and the other materials of concrete—are found in all parts of the country, concrete construction puts minimum strain on the country's hard-pressed transportation facilities. And when, as now, concrete construction must go through at top speed, there is Lehigh Early Strength Cement for the time-saving job, making service-strength concrete 3 to 5 times faster than normal cement can manage.

The demands of war have first call on Lehigh's facilities—and are being met. Yet in most sections of the country, it has been able to serve, without interruption, the thousands of Lehigh dealers and the essential needs of their communities.

Lehigh

PORTLAND CEMENT COMPANY ALLENTOWN, PA. CHICAGO, ILL. SPOKANE, WASH. Lehigh gets in the scrap!

Since Pearl Harbor, Lehigh has salvaged and turned over to the war effort 19,155,959 lbs. of iron and steel scrap . . . 123,984 lbs. of copper and brass scrap . . . and 15,719 lbs. of rubber scrap.

WASHINGTON BULLETIN (Continued)

ments that softened the corporate taxes proposed by the House.

As one business man wisecracked this week, "Congress let George do itthank God."

Renegotiation Reason

The armed forces give this explanation of why they want the pending amendments to the contract renegotiation law (BW-Oct17'42,p8) to include a redefinition of "subcontractor" so that it will cover every supplier short of the extractive industries:

OPA, they say, framed some of its price orders on military goods so that the ceilings would be high enough to keep high-cost marginal companies producing. They give as an example 11" armor plate with a ceiling of \$2 a pound, whereas one of the biggest producers quotes a current market price of 27¢ a pound. Result: Farsighted middlemen gobbled up as much plate as they could and, with demand swamping supply, are now selling it at \$1 a pound, still only

halfway up to OPA's ceiling.

• Recapture Scheme—The military men doubt if they can do anything about such a costly and profitable result under the present law, say that the proposed amendment would enable them to handle it by whittling down the supplying "subcontractor's" profit while leaving the ceiling over the real mar-

ginal producer.

Ads That OPA Likes

OPA's friendly attitude toward commercial advertising merges into positive enthusiasm for the type of ad that plays up ceiling prices as against uncontrolled prices: "You're safe when you deal with us; we obey the price law."

OPA is encouraging such ads as a way of taking a slap at noncomplying stores, and in the hope that they'll help enforce the law by educating the public to stick to stores that stick to the ceilings.

• The Lowdown-Ads explaining the ins and outs of rationing are just as popular at OPA.

OPA Decentralizing

OPA's plan to expand its list of district offices from 39 to around 115 (one for every city of 75,000 or over) means a better, smoother administrative setup. Most of OPA's power and paperwork, principally as regards rationing, will be in the field. Washington will be able to concentrate on braintrusting, forget gummy details.

State OPA directors, however, didn't like the decentralization idea when Henderson first spouted-it to them last week at a special conference. Some argued that their authority would be delegated to underlings, and that the 49 directors (California has two) would wind up as mere figureheads. But things were pretty well patched up by the time the state boys left for home, and little trouble is expected.

• Truman II-Note that the disgruntled directors ran straight to Senator Murray's Small Business Committee (BW-Oct.17'42,p20), which seems slated to

Materials Distribution Splits WPB

The paperwork of materials distribution to war plants has become the subject of one of the bitterest internal fights that ever wracked WPB. The battle, on the surface, is over method.

It's now agreed that the "horizontal" Production Requirements Plan, which allots material independently to each plant, no matter where it stands in the chain of production, must be replaced by some "vertical" system, which will insure that a parts plant receives material that will permit a rate of operation geared to

that of the plant it's supplying.

Opposed Plans—The dispute now, in the jargon of WPB, is post-audit vs. pre-audit. On the one side is the Material Scheduling Plan (BW-Oct17'42,p5) developed by Director General of Operations Ernest Kanzler. Under this, production sched-ules and bills of needed materials would be drafted by the services and the prime contractors, would be scaled down by WPB to fit the ma-terial supply. Then industry would be permitted to order freely what it needs to carry out approved sched-

On the other side is the Steel Quota Plan, which is being pushed by the WPB Iron and Steel Branch. Under this plan, certificates for steel would be issued, up to the amount of the available supply, to the procurement agencies in proportion to their needs as revealed by production schedules. The agencies would turn over the certificates to their contractors. Orders for steel would only be filled when accompanied by a certificate, and a steel mill could accept any order so accompanied.

 Back and Forth—The decision which is up to Donald Nelson and Ferdinand Eberstadt, WPB's program development chief-has swung back and forth. For a while MSP was definitely in; then SQP was substituted; then SQP was out; today the issue is in doubt.

It looks like a pretty abstract and technical matter to get excited over. Actually, however, what's involved is a battle between the manufacturing industries, spearheaded by the auto firms, and the raw material producers, with the steel industry in the forefront.

MSP would give great power to the big manufacturers in formulating detailed production schedules for all of industry. It would be convenient for them, since once a schedule has been approved there'd be little paperwork in getting materials.

• On the Other Side-For the material producers, however, MSP would mean that orders couldn't be placed with them in any scheduling period until the schedules had been completed, a great inconvenience. It would mean that the mills' operations would largely be scheduled by their big customers. And it would put the producers squarely on the spot for any lag in munitions output.

Behind the battling, some progress is being made. Central to any vertical scheme of material control is the formation of realistic production schedules, schedules that can be met with the materials available. Final responsibility for seeing that this is done rests with Eberstadt's Office of Program Development.

• Building Up a Staff-Quietly, almost secretly, Eberstadt is building up a staff for OPD. Key job was filled with the appointment of Donald D. Davis, president of General Mills, as Director of the Program Coordination Division. This division, with the Requirements Committee, makes up OPD, and it is being developed into a division big enough to do a lot of technical grubby work on scheduling production and estimating material supply. Davis, 54, was an engineer and factory manager in his early years until he swung into the financial side after the last war. He has been with General Mills since 1928.

Under Davis, the most important single job is held by Walter E. Heller, of the New York and Chicago commercial financing firm. As chief of the Materials Program Branch, he has the job of obtaining and balancing estimates of material require-

ments and supply.

"Can we get enough labor supply in that upstate New York Community?"



"Let's check it with our bank—the Marine Midland"



Member Federal Deposit Insurance Corporation

120 BROADWAY

WASHINGTON BULLETIN (Continued)

do the same gadfly job on OPA that the Truman Senate Committee, with its war contract investigation, did on WPB.

More Tire Committees

Civilian factories, maybe even office buildings, will soon be setting up labormanagement committees to handle the rationing of tires to employees.

Four months ago OPA made such committees—politely called Organized Transportation Plans—a prerequisite to allotment of tires to war workers in plants employing more than 100. The new "tires for all" program will expand the scheme to every big employer.

The transportation committee is to decide when an employee needs new tires, taking into consideration his daily mileage to and from the plant, and whether or not he operates a pool car. Rationing boards aren't bound to hand out tires after such certification, but it's the mandatory first step.

• Estimate—It is unofficially figured that freezing of all unmounted used tires will throw about 2,000,000 casings into the ration pool. But how many tires the purchase of motorists' extras will bring in, nobody will even venture to guess.

New Rules on Inventory

Because WPB believes that a new wave of panic buying (chart, page 13) has further distorted inventory relationships between big and little retailers, an outright inventory-control regulation will be issued.

Manufacturers and wholesalers of finished consumer goods will be included in the limitation order so that the flow of merchandise can be regulated back to the source. Squawks from the little fellows have forced WPB to abandon its voluntary program (BW—Sep.12'42,p7), and outright control will be put into effect.

The order will stipulate that (1) sellers must maintain the same stock-to-sales ratio as in a 1939-41 base period, (2) those with sales of less than \$100,000 or inventories of less than \$25,000, as of Sept. 30, are exempt as are sellers of foods, farm necessities, and certain kinds of luxury goods, and (3) regulation will be on a total company basis.

Sponge Iron-But Who Won?

The Bureau of Mines is still trying to figure out whether it won or lost. Needled for months by the bureau and by the Truman and Boykin congressional investigating committees for opposition to the sponge iron process, WPB and the steel industry this week suddenly took over sponge iron in a big way.

WPB is recommending to the Defense Plant Corp. that it put up \$450,000 to build Republic Steel a 450-ton plant at Youngstown. This goes far beyond the plans of the Bureau of Mines, which has been trying vainly to get priorities on a 50-ton plant. FI

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on a 50-ton plant.

Instead of the Bureau of Mines process, however, WPB is sponsoring the Brassert-Cape process. Like the bureau's, it involves direct production of iron by passing a deoxidizing gas over heated ore. But it has a different furnace deisgn; more important, it's tied to the blast furnace by using coking gas rather than natural gas and is designed to use high grade New York State ores rather than the low grade western ores in which the bureau is interested.

Unionist in Steel Branch

Details are still to be thrashed out, but Harold J. Ruttenberg of the Congress of Industrial Organizations steel workers is now sitting at a desk in the WPB Iron and Steel Branch. He's the first of the industry branch officials whom Donald Nelson promised to appoint from labor's ranks.

point from labor's ranks.

In WPB Ruttenberg is not to be simply an adviser on labor matters. He has a working job on the branch's key steel distribution committee—the committee that assigns monthly production quotas to the steel mills. The appointment is significant, because the steel workers union has been complaining for months that the small independent mills are being starved for work.

 Runaround?—Appointment of the two promised labor vice chairmen of WPB has been so long in coming that there's speculation as to whether they'll ever be named.

Capital Gains (and Losses)

The Social Security Board's fond plan for compiling a national directory of employers seems to be stirring up considerable hard feeling among business men prone to blame their troubles on Washington. Not a few of the returned "Employer Informational Schedules" point out that the recipients soon will be out of business and looking for something else to do.

Companies which have tempered the hardships of the Battle of Washington by hiring hotel rooms permanently, at daily rates, for the use of visiting executives will soon have to go back to hunting for reservations. Government is working out a deal with Washington hotelkeepers to refrain from such arrangements.

—Business Week's Washington Bureau

FIGURES OF THE WEEK

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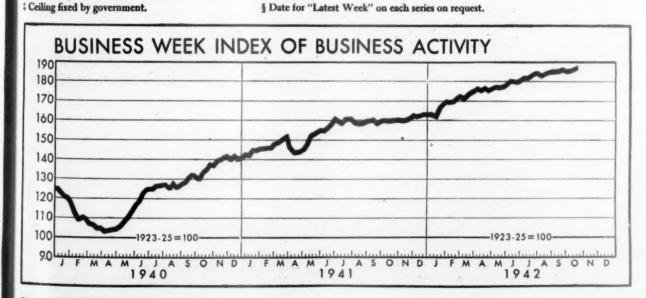
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	§ Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
THE INDEX (see chart below)	*188.0	†187.2	187.4	177.8	160.8
PRODUCTION					
Steel Ingot Operations (% of capacity)	101.0	100.2	96.2	97.6	97.8
Production of Automobiles and Trucks.	20,225	20.275	20,960	21,720	85,600
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)	\$24,529	\$27,017	\$30,987	\$29,851	\$13,202
Flectric Power Output (million kilowatt-hours)	3,717	3,702	3,757	3,308	3,314
Crude Oil (daily average, 1,000 bbls.)	3,902	3,857	3,936	3,545	4.111
Bituminous Coal (daily average, 1,000 tons)	1,900	†1,902	2,093	1,879	1,921
TRADE	0.0	0.7			0.0
Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars)	88	87	83	83	92
All Other Carloadings (daily average, 1,000 cars)	64	64	65	53	58
Money in Circulation (Wednesday series, millions)	\$13,932	\$13,830	\$13,440	\$11,624	\$10,283
Department Store Sales (change from same week of preceding year)	+25%	+2%	-3%	-12%	+13%
Business Failures (Dun & Bradstreet, number)	132	173	117	224	178
PRICES (Average for the week)					
Spot Commodity Index (Moody's, Dec. 31, 1931 = 100)	233.4	234.7	233.4	231.6	205.9
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100).	155.6	155.3	155.0	153.9	144.7
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100).	185.5	186.5	183.6	185.2	153.4
Finished Steel Composite (Steel, ton)	\$56.73	\$56.73	\$56,73	\$56.73	\$56.73
Scrap Steel Composite (Iron Age, ton)	\$19.17	\$19.17	\$19.17	\$19.17	\$19.17
Copper (electrolytic, Connecticut Valley, lb.)	12.000e	12.000e	12.000€	12.000€	12.000€
Wheat (No. 2, hard winter, Kansas City, bu.)	\$1.19	\$1.21-	\$1.20	\$1.14	\$1.10
Sugar (raw, delivered New York, lb.)	3.74€	3.74e	3.74e	3.74e	3.50€
Cotton (middling, ten designated markets, lb.)	18.96¢	18.80¢	18.72€	20.26e	16.12e
Wool Tops (New York, lb.)	\$1.240	\$1.229	\$1.203	\$1.291	\$1.301
Rubber (ribbed smoked sheets, New York, lb.)	22.50¢	22.50¢	22.50∉	22.50¢	22.50∉
FINANCE					
90 Stocks, Price Index (Standard & Poor's Corp.)	74.5	74.5	68.8	61.0	77.0
Medium Grade Corporate Bond Yield (30 Baa issues, Moody's)	4.24%	4.23%	4.27%	61.8 4.26%	4.29%
High Grade Corporate Bond Yield (30 Aaa issues, Moody's)	2.80%	2.79%	2.80%	2.83%	2.73%
U. S. Bond Yield (average of all taxable issues due or callable after twelve years)	2.33%	2.34%	2.34%	2.33%	2.13%
U. S. Treasury 3-to-5 year Note Yield (taxable)	1.28%	1.28%	1.27%	0.97%	0.72%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average)	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6-months, N. Y. City (prevailing rate)	1-1%	1-1%	1-1%	1.00%	1.00%
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BANKING (Millions of dollars)					
Demand Deposits Adjusted, reporting member banks	28,183	27,819	28,085	24,725	24,640
Total Loans and Investments, reporting member banks	35,908	35,975	34,358	31,502	29,385
Commercial and Agricultural Loans, reporting member banks	6,353	6,330	6,317	6,948	6,568
Securities Loans, reporting member banks	802	814	816	846	990
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks.	22,149	22,179	20,588	16,446	14,378
Other Securities Held, reporting member banks	3,495	3,523	3,457	3,724	3,763
Excess Reserves, all member banks (Wednesday series)	2,710	2,290	3,039	2,886	5,234
Total Federal Reserve Credit Outstanding (Wednesday series)	4,042	3,784	3,857	2,415	2,313
* Preliminary, week ended October 17th. † Revised.					



Better Light-Better Sight - Better Fight!



blanks for diesel engines.
Before they put in new lighting to speed production, he had to light matches to inspect the work. That took time. Now he can inspect at one quick glance. He says, "No shadows—no rejects!"

General Electric engineers are trained to uncover the lighting bottlenecks that slow up production. And it costs nothing to have their helpful advice. See your G-E lamp supplier, or write General Electric, Nela Park, Cleveland, Ohio today! Here's a useful tip. When you buy lamps, be sure to get the kind that are made to stay brighter longer. Always specify G-E MAZDA lamps.

2 A PILOT'S LIFE hangs by her threads! When Theresa Myer sews panels into a parachute, it takes skill and attention to make every stitch perfect. And sewing white thread on white cloth is hard on the eyes. But not with cool, efficient G-E Fluorescent lighting. Like other aviation workers, Theresa now does better, faster work with less fatigue—thanks to better lighting.

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3 FRANK TLOCZYNSKI grinds pistons for air compressors—vital parts in war machines. If they aren't accurate to as little as .0002 of an inch, they might hold up completion of some critical war equipment. Frank says absence of shadows makes G-E Fluorescent lighting perfect for machine work.



4 FRED BUESCHEL makes dies in his own die shop, "In cutting dies," he says, "we follow a pattern scratched on the metal. The line is so faint it's practically invisible in poor or glaring light. And one little mistake can spoil a die that takes 100 hours to cut. When I put in better lighting it was just like coming out of the dark!"



5 BETTY NALLY'S job makes all the others easier. She works in a G-E MAZDA lamp factory, and her nimble fingers speed one of hundreds of precision operations that help make G-E MAZDA lamps stay brighter longer. If you knew Betty—and the thousands of hours of research behind her job—you'd know why it pays to look for the G-E name on every lamp you buy!

G-E MAZDA LAMPS
GENERAL BELECTRIC

THE OUTLOOK

One Big Shortage Problem

Day is near when American economy will be dominated by job of dealing with scarcity all along the line. Newest pinch is in transportation as railroads issue warning on 1943.

Shortages of raw materials and semifabricated parts in war production are an old story. The manpower crisis is a much discussed topic, even though it is still in its earlier stages. And hand-inhand with manpower goes the war housing pinch (page 24). Scarcity of manufactured goods for civilian use will become increasingly apparent as inventories are drawn off. Necessity for being more economical with staple table items like meat (page 17) and coffee are widely publicized, but the need for rationing shortly will spread to food products that Americans have come to believe inexhaustible. And we are at last coming face to face with a transportation problem-domestic as well as external—of extreme gravity.

What the Shortages Mean

to hite

Few people have felt all of these things as yet; many have scarcely felt any of them. But the day when they will dominate American economy—home, office, farm, and factory—is near. The problem in all its complexities should, consequently, have a very high place in business thinking today.

The difficulty in remedying shortages in the war plants stems largely from the fact that priorities systems to date have become outmoded almost before they have been put into practice. Growth of the war effort forced the hopeless inflation that overtook the initial priorities system; it has forced the Production Requirements Plan into the has-been class because Purp tried to allocate too broadly.

Do the Services Run the Show?

The business of working out a new plan to take over, as PRP gradually is displaced, now occupies WPB. Differences (page 7) are primarily on the matter of whether the armed services should write their own ticket as to what they need and how fast they have to have it, or if they should be controlled by a WPB definition of absolutely essential civilian needs.

Imperfect as is the progress in priorities, we have tried more conscientiously to cope with materials shortages than with any of the others. Solving the manpower problem, for example, has been slowed by political as well as by practical concerns. What faction will win the political fight remains to be seen, but Paul McNutt said on Wednesday that he would have a bill in the president's hands within two weeks because the situation has become "too complex for voluntary action."

Indicative of its seriousness, too, was the decision announced by the Army this week to furlough 4,000 miners to help get vital metals out of the ground. And the steel industry is pushing for uniform adoption of a 48-hour week with time-and-a-half for the extra eight hours.

Chances are that the carriers and the Office of Defense Transportation will refuse to let anything interfere with hauling the war goods. There is not, however, any such certainty that it will

be possible that all other goods can be moved, and moved on schedule.

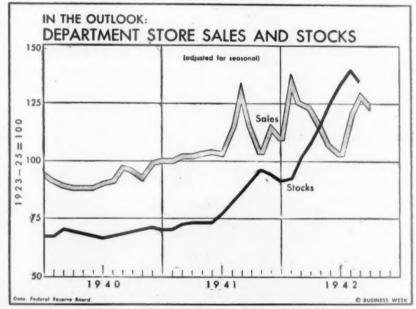
The Association of American Railroads is not one to spread alarming rumors. Yet its chief, J. J. Pelley, this week declared that the outlook for 1943 is none too reassuring because the roads no longer have any reserves of equipment upon which to call. Pointing up his statement was the drop in oil shipments by tank car to the East Coast, the figure for last week being 766,410 bbl., lowest since mid-July and comparing the peak of 856,710 a month ago.

Repair Problem Mounts

The transportation difficulty, typified by the fall in oil deliveries, is simply that you can't run at peak load indefinitely. The tank cars are having to dropoff the line for time-consuming repairs. And the highway haulers have a repair and replacement problem that is tougher even than that of the railroads (page 16).

(page 16).

When it was announced this week that steel production was at 101% of capacity, the second successive week



Value of inventories held by the nation's department stores increased over 80% in the 15 months between May 31, 1941, and Aug. 31, 1942, despite the fact that sales during that period were at the highest levels in history. To combat this stockpiling trend, and to assure adequate supplies to retailers and wholesalers who, patriotically, have refrained from overbuying, the Office of Price Adminis-

tration promised at midweek to impose, "in the near future," the rigid control of inventories of finished consumers' goods which have long been anticipated. The order will establish maximum "normal" stocks, which are defined as stocks which bear the same relationship to sales as that which obtained for the same commodity in the same quarter of the three years, 1939-41.



FREIGHT BY AIR

Flying freight cars are out of the planning—and conversation—stage at Douglas Aircraft Co. plants. On pro-

duction lines are C-47's—regular cargo planes with reinforced flooring and wide freight doors—which, according to reports, have helped reopen the Burma Road through the sky.

above the theoretical top, it might have been assumed that steel, like the carriers, was heading for repair troubles. This is not necessarily the case, however. For one thing, the steel mills have a small cushion for repairs in their theoretical capacity figure. For another, the weekly operations are figured on the basis of June 30 capacity, and an undetermined amount of electric furnace, if not open hearth, has been added since that time.

Shifts in Production

A very pointed reminder of what has happened to the supply of manufactures for civilians comes in the form of a WPB announcement that 3,021 plants in 74 metal-working industries had, by the end of summer, almost completely shifted to war work. But the story doesn't end with metals. Rationing of clothing is predicted by midwinter, due simply to huge textile demand for the armed services and for lend-lease. (That there's no immediate shortage in "soft" goods, even though production may already be declining, may be seen from the chart, page 13).

may be seen from the chart, page 13).
Finally, consumers will buy what they can get to replace what they can't. So Washington fully expects a big increase in consumption of dairy products, for example, in place of meats. Shortage of dairy products? It's not impossible. Lend-lease requirements for dairy products must come ahead of ordinary domestic demand.

Inventory Thaw

Renamed WPB branch gets job of unlocking warehouse doors on frozen fabricated stocks. Steel is next.

A new name and a new boss for WPB's old Inventory and Requisitioning Branch merely reflects the fact that it has a bigger job. Rechristened the Materials Redistribution Branch and headed by Col. Charles R. Baxter of Army Ordnance, the branch has expanded far beyond the task of tracking down export stocks orphaned by the war which was once its main preoccupation (BW-Mar.28'42,p36).

• Semifabricated Idlers-Its major aim

• Semifabricated Idlers—Its major aim now is to move into war production the big stocks of semifabricated goods, which for one reason or another are idle in the hands of manufacturers. Commonest cause of idle stocks are WPB L-orders forbidding further production of various lines of goods; another is that a manufacturer finishes a war contract, which is not renewed.

Materials Redistribution Branch has major programs under way to recapture such stocks of copper, aluminum, manila rope, magnesium, tin, nickel, white metal, brittania metal, and pewter. Next week it will start on its biggest program yet—getting hold of millions of tons of idle iron and steel. There are several dozen other programs also pending.

• Inventory Control—Still in the offing is some kind of program to control excessive inventory holdings by war contractors. The branch is charged with this job, but it's already staggering under its present budget of work and hardly has time now to do much about the long-baffling task of regulating inventories.

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Major reliance in finding idle inventories is placed on questionnaires sent out to lists furnished by the Census Bureau. About 90,000 were sent as part of the copper program, 57,000 to holders of manila rope; close to 200,000 steel queries will be mailed. Owners are asked to report the type and amount of their holdings. It's recognized that a questionnaire leaves plenty of room for evasion, but it does produce initially as much material as the branch is equipped to handle, and finer combing can come later.

• Special Units Set Up—To deal with the returns and to handle redistribution, special units have been set up for each material. The Copper Recovery Corp., a subsidiary of the Reconstruction Finance Corp.'s Metals Reserve Corp., shares offices in New York with a section of the WPB copper branch. Steel Recovery Corp., also an MRC baby, is being organized in Pittsburgh. The manila rope program is handled directly through an MRC agent.

Several of the programs are handled by commercial firms acting as agents for MRC. National Lead looks after white metal, brittania, and pewter. Federated Metals Division of American Smelting & Refining handles aluminum and magnesium.

• Three Categories—When returns from the questionnaires come in they fall naturally into three groups. Metal in standard mill form offers no problem. It can be disposed of immediately to war contractors under Priorities Regulation 13, which permits sale of frozen stocks to purchasers having suitable priority ratings.

Sometimes it is necessary to juggle the metal allocations of a potential purchaser who doesn't have a priority rating because his needs have been met by an allocation of the output of a raw material producer. Occasionally it is necessary to threaten requisitioning to make the owner release the goods.

the owner release the goods.

• Materials Indexed—At the other extreme is the material which has undergone fabrication, making it useless except for scrap. In between fall special mill shapes and fabricated forms which may have some use. Presence of such material is indexed on punch cards, which are kept for a while in case a need should show up for the material in its present form. If no need develops, this material eventually has to be demoted to scrap.

Copper Recovery Corp. now has rec-

Business Week • October 24, 1942

ords on some 50,000 tons of copper in its files, has actually moved about 30,000 tons. Similarly, unallocated stocks of aluminum amount to about 5,000 tons, while nearly 14,000 tons have been moved.

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• No Formula on Prices—Where the government really comes into the picture is in handling the fabricated materials that go for scrap. In this case, Metals Reserve and its subsidiaries take part of the rap by buying the material and reselling at scrap prices. There's no constant formula for the price which MRC will pay for metal to be scrapped. A formula is set up on each type of material

General principle is that the owner of the inventory will not be compensated for his expenses in fabricating metal. This is based on the theory that (1) it has no commercial value now except as scrap and (2) that all the WPB L-orders gave the manufacturer a period of grace in which he should have worked off fabricated inventories rather than keeping them idle until the day when the government would have to come knocking at the door for them.

• MRC Absorbs Some Loss—Price paid, therefore, falls somewhere between the mill price of the material before fabrication and the scrap price. Usually, MRC absorbs 15% to 30% of the loss, taking the higher percentage when the spread is great.

There's some thought in the upper levels of WPB that the movement of idle inventories could be accelerated by a more liberal price policy—perhaps extending to absorbing part of the fabrica-

tion cost. But this is still indefinite.

• Rope Not Scrapped—A special case of government buying arises in the manila rope recovery program, where Army, Navy, and MRC are the only legal buyers. Here the rope is not scrap, is usable in its present form, and the price paid is therefore more liberal—cost of acquisition plus 10%.

Taxes: 26 Billions on the Line

Revenue act of 1942—an admitted stopgap—is painful enough, but it looks good by comparison with earlier versions. Corporations get a break from Senate-House conferees.

Not quite eight months after it began work, Congress has presented the country with the 1942 revenue act. Now for the first time taxpayers can make an estimate of the slice that the government intends to take out of this year's income.

• Painful Process—Surrendering that slice to the tax collector will be a painful process, because the new revenue bill comes down on both individual and corporate incomes in a way that peacetime economists never believed possible. In a year of operation it will add about \$9,500,000,000 to government revenues, bringing the total federal tax load to \$26,000,000,000. Something like 23,000,000 people will pay a tax for the first time.

Even so, the new revenue bill is a long way from the end of the line in wartime taxation. The Treasury has already announced that it has plans in the works that would scrape up at least \$6,000,000,000 more. Congressmen admit that the bill they just passed is only a stopgap. After elections they will go over the tax machinery again, looking for ways to make it wring out new revenue.

• Pros and Cons-Every taxpayer has his own opinion of the new bill, depending on how he makes out in comparison with the next man. Almost everyone agrees that it is inadequate as an anti-inflation measure. At the same time, many experts think it throws an intolerable load on particular groups, such as individuals with middle-bracket incomes and small corporations that need working capital for war production. But the

final draft of the tax bill gains by comparison with earlier versions. As it stands now, the program is no masterpiece of fiscal policy, but it isn't anywhere near as bad as it was at various stages in its evolution.

Most of the important features of the new tax bill were written in by the Senate Finance Committee (BW-Sep. 19'42,p14). Although the House has the constitutional right to originate revenue legislation, about all it contributed this time was the serial number for the bill. In conference, House Representatives receded on everything but the few points needed to make it a respectable compromise.

• Socking the Individual—This means that in its final form the new bill accepts the Senate's plan for putting most of the additional tax load on individual incomes rather than on corporations. About \$6,600,000,000 of the extra revenue will come from individual tax-payers—roughly \$3,000,000,000 from regular income taxes and \$3,600,000,000 rom the 5% Victory Tax on gross income. Corporations will have to dig up an extra \$2,300,000,000 under the new law. The remaining \$600,000,000 or so of additional revenue will come from excises and other indirect levies.

Business men don't consider that they are getting off light when they have to pay a 40% normal and surtax and a 90% excess profits tax, but after seeing the Treasury's program and the House version of the tax bill (BW-Jul.18'42, p17), most of them are glad to settle on the Senate's terms. The final bill allows a 10% postwar refund on the excess







NO SECRET NOW

Although the employees at three widely separated shipyards have had a reasonably accurate idea about the ultimate use of the odd-shaped, sea-

going craft with the inbuilt ramps, on which they have been working for several months past, it remained for the Navy to lift the mystery officially when the three ships were launched this month. A Kaiser shipyard built one of the tank-landing craft (left) in 125 days. Another (center) was launched at Charleston, S. C., while the third, the "LST4", is a product of Pittsburgh. Half the steel is used in such a ship as in a Liberty cargo ship.

profits tax, and it includes a set of relief provisions, which will make the difference between profit and loss to a num-

ber of companies.

• What Might Have Been-The House bill called for a 45% normal and surtax and a 90% excess profits tax with no refunds. The Treasury originally asked for a 55% levy on regular income and a graduated excess profits tax ranging from 50% to 75%. On its face, the Treasury proposal looks easier than the Senate's plan, but under it corporations would have had to pay normal and surtaxes on the part of their income that is exempt from the excess profits tax. On balance, the Treasury plan would have cost them about \$800,000,000 a year

Undoubtedly the new tax bill will be a heavy load for corporations, but its relief provisions will cut down the number of hardship cases. It puts a ceiling of 80% on the effective tax rate that any company will have to pay, and it allows a tax deduction, chargeable against the postwar refund, for debt repayment. Utilities will be permitted to deduct dividends paid to preferred stock when they estimate taxable income. Corporations buying up their own bonds below par will not have to pay a tax on the

paper profit.

· Carry-back Allowed-The bill also takes some of the teeth out of its 90% excess profits tax by allowing a two-year carry-back of unused portions of the excess profits tax exemption. Companies using the average earnings method to compute their exemption can substitute an artificial figure for a particularly bad income year in the base period.

Individual income taxes are another story. The new bill boosts the normal tax from 4% to 6% and jacks up surtaxes all along the line. On the first \$2,000 of surtax net income the rate is 13%, and it ranges upward to 82% in the top bracket. (Before the new law, surtax rates ran from 6% to 77%.) This means that taxpayers will owe the government 19% on the first dollar of tax-

able income.

• Victory Tax-In addition, the 5% Victory Tax applies to all income above \$12 a week without exemptions. This is a withholding tax, which will come out of 1943 income. Part of the Victory Tax is really forced savings, since taxpayers will get a postwar refund.

· Liberalization-In one respect, however, the new revenue act does liberalize tax law. It gives capital gains taxation a complete reworking and comes out with a system that is somewhat closer to what investors have been demanding (BW-May30'42,p68).

Biggest change cuts the holding period for long-term capital assets to six months (instead of 18 as required by present law) and loosens the restrictions on offsetting capital losses against capital

gains.

Accent on Upkeep

How long they keep 'em rolling depends on how well they maintain the equipment they have, truckers hear.

Even though they will be favored in some respects because of their contribution to the war effort, motor truck operators will have to scrape the bottom of the barrel to keep their equipment

rolling for the duration.

• Question of Survival—Meeting in St. Louis last week for the "War Problems Convention" of American Trucking Assns., Inc., the operators were informed bluntly by their own industry leaders, by representatives of the automotive industry, and by officials of a half-dozen federal agencies that their ability to serve the nation and to survive will depend on how carefully they maintain present equipment.

Limited in their prewar activities largely to their relationship with the Interstate Commerce Commission, the truckers found themselves discussing their industry problems with representa-tives of the War Production Board, Office of Defense Transportation, Office of Price Administration, and even the Selective Service System whose calls for military service have depleted the truck-

ers' personnel rosters.

• No Replacements—The truckers were warned that the 5,000,000 trucks now running cannot be replaced by new equipment, that replacement parts may

become scarcer for trucks not directly serving the war effort or essential civil ian use, and that the rubber situation continues to be critical; and they went into a series of "clinics" to discus means of conserving their present rolling stock.

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Technical representatives of the gasoline and oil industry told the operators how to get the best results out of fuel whose octane content has been reduced as a result of rationing. Leading tire manufacturers sent representatives to answer questions on the conservation of rubber and to discuss the practicability of recapped tires.

• Speed Limit Change Asked-Pointing out that most heavy trucks are geared to a cruising speed of 38 m.p.h., and that a higher speed limit would conserve rubber and fuel, the convention planned an appeal for a change in the 35-mile limit

recently imposed by ODT. Ted V. Rodgers, president of the association, said the trucking industry has given an honest voluntary response to ODT orders, but that ODT Order 2]. requiring certificates of war necessity from all operators (effective Nov. 15) has teeth in it, and compliance will not

be left to the will of the operator.

• Pinch on Nonessentials-Wade T. Childress, WPB deputy director general of field operations, warned operators they must face the fact that, as time goes on, an increased demand for trucks in the most essential services gradually will reduce, if not eliminate, motor transportation in all enterprises not necessary to the war effort.

Missouri Senator Harry S. Truman told the convention that "silly arbitrary regulations must not hinder the man who is helping to get the goods through," that the government must listen to the practical men in the trans-

portation industry.

• Tires and Parts Needed-Praising the motor transportation industry for its contribution to the movement of war and essential goods, Truman said the government must see to it that tires, parts, and replacements are made available for trucks engaged in such war

Col. Claud C. Earp, Missouri Selective Service director, made the industry no promises concerning the deferment of key men, but warned that a sharp rise in inductions may be expected during

the remainder of the year.

• Price Ceilings Hit-Contract carriers expressed some dissatisfaction with ceiling price controls, where trucks and the services of drivers are leased on a contract basis. Robert A. Nixon, OPA director of transportation and public utilities, explained that the total price for such rental, including drivers' wages, must not exceed the highest rate charged for the same service last March, even though the carrier might be required to pay higher union wages.

CONGRESS BITES BACK

For months, influential con-gressmen have been waiting for a chance to swing a haymaker at the Treasury. This week they got it, and with a simple amendment to the tax bill they paid off a long list of grudges. To congressmen smarting under the Treasury's frequent criticisms and even more frequent "recommendations" (BW -Oct.10'42,p7), that amendment makes very pleasant reading.

An innocent-looking paragraph, it instructs all government agencies to furnish directly to the joint congressional committee on internal revenue any information it may request. Its effect is to shove the Treasury out of the inside track on revenue and yield estimates. The joint committee staff, Congress's own advisers and tax experts, can now demand information direct from the Bureau of Internal Revenue instead of clearing through the Treasury.

Meat Scramble

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Though civilian supply is cut by Army and lend-lease orders, winter prospect for choice cuts is brighter.

To learn what is happening to the beefsteaks, pork roasts, and lean bacon that your wife can't find in the market requires no sleuthing beyond a talk with neartically any meat packer.

• Demand Outruns Production—September cattle slaughter is the highest September known, surpassed by only four months on record. Hogs and sheep both hit new any-month highs in September. Yet many a prosperous housewife is offered nothing but unfamiliar cuts by her butcher. However fast the slaughter rate climbs, demand for meats increases even faster.

For instance, a small pork packer in Chicago has been running his plant 24 hours a day—unusual in the industry—to produce cured and canned meats for military and lend-lease orders. Of those pork cuts usually sold fresh, some of his have gone to the armed services, but most to retail meat dealers.

• Army Gets Priority—Last Wednesday morning he received from the Army Quartermaster Depot an unsolicited order for 250,000 lb. of fresh pork loins to be delivered in the coming month. Said he, with a sigh of resignation: "That's practically every pork loin we can produce. So our regular customers don't get any."

One of the big packers averages in inventory a given tonnage of pork, which may be called 100%. Against the heavy consumption and light supply of livestock to be expected toward the end of any summer, this company may build its pork in coolers and pickle cellars up to 150% and in a normal August and September will ship this out at a weekly rate exceeding 20%.

• What Slowed It Up—But this year, government demand in the earlier months kept the firm from accumulating the desired seasonal surplus. Heavy domestic consumption drew down the pork inventory, and soon the bottom of the barrel was in sight. By the time the early spring pigs began coming to market late in September, this firm's inventory had shrunk to 50%, and the company was able to ship only about 17% weekly, because the average processing time for hams, bacons, and the like is around three weeks.

What will happen in the next few weeks and months is not easy to say. Pervading all prophecies, estimates, and guesses is an if—if the government doesn't change its requirements and thus wreck all the underlying assumptions



Under voluntary meat rationing, you're expected to forego over 2½ lb. a week of steaks, chops, roasts. But unrationed and fairly plentiful are

such items as (left to right) calf liver, beef tongue, beef heart, sweetbreads, calf brains, pork kidneys, veal kidney, and (rear) bacon squares, chicken.

 Lend - Lease Unpredictable—Right now, as the trade sees it, meat demand is feeling a set of conditions that are abnormal even beyond what might be expected in these times. Military requirements are moving along at the expected rate and may be predicted with reasonable accuracy on a nation-wide scale despite possible local dislocations of supply and demand. Lend-lease is something else.

During the summer, the Federal Surplus Commodities Corp.-buying for lend-lease-curtailed its purchases of meat so that there might be more liberal supplies available for domestic civilian consumption in those months of short livestock supply. Now, as the fall run of hogs and cattle begins moving to market, FSCC is buying at a pace that not only keeps up current lend-lease shipments but that also is intended to replenish its stockpile. How deep were the summer's inroads into the stockpile. and how much will be required by lendlease in the months ahead, Washington is not telling.

• Rebuilding Stocks—The present OPA restriction of wholesale meat shipments to 75% of the pork and 80% of the beef in the corresponding month last year is retarding the flow of meat into consumer channels. The big packer mentioned above, whose pork stocks fell at one time last month to 50% of normal, had by early this week rebuilt his inventory a little and is gaining a few percent a week.

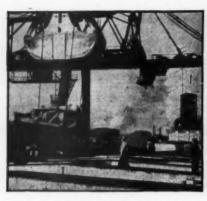
Whether compulsory meat rationing

comes, depends on several unknown quantities, of which the only one that matters is Administration pressure. Many an OPA official asserts, off the record, that the complexities of rationing meat in this country are so great that he would do anything to avoid getting involved. Others want rationing immediately.

• Backing Voluntary Plan—Meat and livestock folks insist that, although it may be just around the corner, compulsory rationing is neither practicable nor necessary. They are plugging the voluntary rationing urged by Secretary Wickard as chairman of the Food Requirements Committee. Through their American Meat Institute and National Live Stock and Meat Board, they are throwing behind the Share-the-Meat program everything from advertising to prayer. If this works, civilians will hold themselves to 2½ lb. consumption a weck—with no limit on variety meats such as tongue, liver, kidneys, tripe, brains, and pigs' feet.

Actually, the effort is to induce upperbracket consumers to curtail; families below \$1,500 annual income always cat less than 2½ lb. The national average has stood at 2½ lb. in recent years, and there will be 2½ lb. per capita available throughout the coming year, by even the most pessimistic figures.

 No Ceiling on Meals—One reason why good restaurants apparently have plentiful supplies of steaks, chops, and roasts is that the lack of ceilings on meals thus far has permitted managers



"CAT" IN THE HOLD

Speedier unloading of coal boats, resulting in more round trips in a critical war year, has been accomplished by



one Lake Ontario handler by the use of bulldozers in the holds of coal boats. When the 12-ton clamshell bucket unloading coal begins to scrape bottom, instead of shifting to a



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smaller cleaning-up bucket, a Caterpillar Diesel D4 equipped with a bull. dozer is lowered into the hold where it "dozes" the remaining coal into piles large enough for the clamshell

to control the demand for quality meats by raising prices, the time-honored method in a free economy.

Scheduled for early announcement is an agreement from meal sellers to maintain previous standard sizes of meat portions at present prices unless the cost of meat to them should increase. The other reason is that many a packer or wholesaler finds ways around ceilings, because the hotel-supply trade can and will pay more liberally than most house-

• Lean Pork Scarce-Though in the months to come civilians will have plenty of meat by prewar standards of quantity, there definitely will not be all of the meat of every kind that everybody will want all of the time. For instance, such lean pork as loins, shoulders, butts, and lean trimmings will show approximately a 40% decrease. The fatter meats-bacon, fatbacks, and the likewill show approximately a 41% increase.

Spareribs, neck slices, and other less known and less coveted cuts will show a 50% increase. Because the government in canning beef or pork does not want tenderloins, there should be an abnormally large supply of these fancy cuts.

• Other Items Plentiful-There will be lots of other good meats that the government does not want, including ox joints, short ribs, soup bones. Best judgment in the trade is that eventually the government will declare many such relatively plentiful items need not be counted in the weekly 2½ lb. of voluntary rationing.

Meat packers agree that within the next few weeks, there should be considerably more bacon available. And, just as an added ray of dinner-table hope, warehouses should soon begin filling up rapidly, and there is only so much shipping space available for lendlease meats. Hence, there is a fair chance that by midwinter the run of hogs to slaughter may be so great that there will be enough pork for everybody.

Kaiser Plan Fails

Boilermakers in Portland object to importing labor from New York, so shipbuilder stops hiring. Negro problem grows.

When officials of the Henry J. Kaiser Co. agreed last week to quit New York recruiting of workers for Kaiser's Portland (Ore.) shipyards and to eliminate (for the time being at least) the special trains hauling men to the Coast, they acted under pressure from the A.F.L. boilermakers' union which hasn't hesitated to show considerable resentment over the influx of Easterners into their bailiwick (BW-Oct.10'42,p24). Insistence of boilermaker leaders that the importations were unnecessary and that a plentiful supply of shipyard labor still is available in the Pacific Northwest apparently persuaded Kaiser officials to give the union a chance to "put up or shut up.

• Launch Stabilization Plan-At any rate, when son Edgar F. Kaiser and bigwigs of the Portland Metal Trades Council emerged from the A.F.L. Labor Temple after a 4½-hour conference Oct. 14, the company had agreed to discontinue New York hiring, and the union had assumed the responsibility of supplying the 40,000 more workers needed in the three yards by next March. Also all parties had agreed to establishment of a "stabilization plan" similar to that in force in the San Francisco Bay area shipyards designed to prevent constant shifting of labor from yard to yard. The plan will be supervised by a joint committee representing both employers and unions (a principal and an alternate for each) and headed by a neutral chairman. It is supposed to settle all "beefs" that arise.

Meanwhile, many of the New

Yorkers hauled out to Portland by Kaiser have been dissatisfied with local conditions and have been trying to get back home, a fact which worries the Kaiser interests considerably, because they figure they have about \$94 tied up in every man imported, and they want to get it back.

• Negro Issue Grows Hot—The "Negro problem," new to Portland, continues to feed the fires of dispute within the" boilermakers' ranks. The "Kaiser specials" brought some 139 Negroes from New York to join about 750 who already were working in the shipyards under union work permits, not as union members. J. A. Franklin, Kansas City, head of the boilermakers' international union, ordered Tommy Ray, secretary and business agent of the Portland local to take them in. Ray refused. Last week they still were working under permits, and Ray announced no more would be issued. The Portland Negro problem has been further complicated by the railroads' importation of 500 from the South as track workers. After one week many of them quit 62¢-anhour jobs and flocked to shipyards for higher wages.

• Boilermaker Boom-Incidentally, the Kaiser shipyards have brought prosperity to the Portland local (No. 72) of the boilermakers' union. In 1930, when Tommy Ray was elected business agent it had 135 members. Now some 50,000 workers pay \$2,100,000 yearly in dues. Initiation fees run from \$20 to \$30 per member, and Tommy Ray says there'll be 25,000 new members added during the next 12 months.

The boilermakers' new "clubhouse," a three-story renovated building with a facade of rich Napoleon marble, in-cludes the "plushiest" bar in Portland and the city's most expensively equipped bowling alleys. There's considerable grumbling among members, by the way, because the bar isn't open to them but is reserved for "special parties."

18

Scrap Roundup

New York rings the bell with 100,000 tons of junk as LaGuardia fumes and drive loses two key men.

The New York City scrap metal drive provided a perfect display of democratic behavior under stress of a crisis. Its progress was marked by passion, personalities, and pandemonium. when it ended last week, the net result was performance. The five boroughs of the metropolis had produced over 100,000 gross tons (2,240 lb. each) of household scrap from cellars, attics,

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Personnel Toll-A commentary on, if not a byproduct of, the New York excitement was the angry resignation of John M. Hopwood as president of the government's War Materials, Inc. (BW Oct3'42,p22). A previous exit was that of Robert Moses, who had been in charge of the heavy scrap end of the city's drive. Moses, New York park commissioner, let it be understood that he was bowing out because the U. S. was too slow on his special projects.

New York's 100,000-ton total was above expectations. It was noted, however, that when the useless items are discarded, no more than 65,000 tons may be left for the steel mills to turn against the enemy. But New York's campaign is only one in the nation-wide roundup sponsored by the newspapers which promises a total of 3,000,000 tons. When the initial push has passed,



At odds with WPB over his authority in the nation-wide salvage drive, John M. Hopwood of Pittsburgh resigned as president of War Materials, Inc.

active salvage committees will continue to promote the gathering of scrap, thereby keeping alive the public's sense

of responsibility.

• Everybody Helped-Organization of the New York drive took in juvenile groups, veterans' associations, women's clubs, civic officials-in fact, about everybody in town but the junk dealers. Each of the five city boroughs was allotted a day on which municipal trucks would pick up sidewalk collections and cart them to regional dumps. Newspapers played the campaign to the limit in their news columns. Radio, movies, and oratory raised public enthusiasm to a fanatical pitch.

In one section an old gentleman was amused by the sight of several ragamuffins hurrying toward a scrap dump with a metal gate. His smile faded when he discovered that it was his gate that was being donated by proxy. In Queens 300 metal markers from the graves of war veterans were found on the scrap heaps. Officials hastily recovered the markers and condemned their removal. • Minutiae-Gripped by a sacrificial rapture, two Richmond kids tossed practically new bicycles on a scrap pile, drawing from Mayor LaGuardia a warning that usable equipment should be retained.

A Bronx garage owner faced a judge on a charge of having taken an electric stove tossed on a scrap heap by an orchestra leader. In Brooklyn, Samuel Barr fell dead from a heart attack while struggling for an item of scrap with his father-in-law, who was guarding the pile. • LaGuardia Piqued-As the mountains of scrap grew at the main dumps, city officials seemed to remember the junk dealers, who would have to move the stuff to the steel mills. Conference with dealers brought on LaGuardia tantrums of unusual violence. It developed that the yards didn't particularly want this scrap on which the metropolis and its citizens had expended so much sweat and emotion.

The dealers pointed out that it was household junk-bedsprings, baby buggies, toys, buckets, kitchen utensils, and the like. First there was the trucking problem from the dump to the yard. Then it would be necessary to sort the copper, brass, aluminum, lead, and other metals from 75 different grades of iron and steel scrap. Also the yard would have to bale the collection, because most household scrap is thin sheet steel, which burns like paper if tossed unbaled into a steel furnace. Thereafter the sorted and processed scrap would have to be trucked to a rail siding.

• Pinched by Ceiling-Dealers claimed it would cost \$5 a ton to haul the junk to their yards, \$5 more to sort and bale it, several dollars more to get it on board freight cars. The few bids received by the city for the household junk were around \$4.50 a ton. New York dealers



Pending litigation may save Manhattan's unfinished \$5,000,000 Hudson Towers from the scrap heap. As salvagers look at the structure, it is just a 1,500-ton pile of structural steel.

can only get \$13.33 (the local ceiling price) when they sell to the steel mills.

LaGuardia, apparently enraged by bids he considered too low, issued statements right and left. When this seizure had passed, the dealer's side was gently presented to the mayor. It was pointed out that special conditions prevailed in New York, cost figures were detailed, and he was shown that prices paid in other municipal drives ranged from \$4 to \$8 per ton.

• Hatchet Buried-When LaGuardia had made peace with the dealers, they agreed to handle the collection as fast as possible, with each yard allotted as much tonnage as it could take care of. The agreed price of \$4.50 a ton indicated that the dealers stood pat, and that the mayor had to back down.

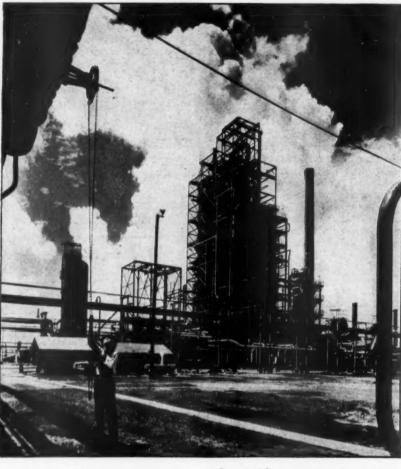
Resignation of the peppery Robert Moses is said to have had a bearing on the Hopwood fade-out from War Materials, Inc. In New York, Moses had charge of obtaining all scrap that would require labor and hence would involve costs greater than those allowed by the price ceilings. He was to locate the scrap, arrange with the owner for relinquishing it, then turn the project over to Hopwood, who would let contracts for the removal and pay for it from the \$500,000,000 allotted to WMI for the purpose.

• Double Benefit Seen-To Moses and LaGuardia the prospect was alluring. Why not employ these government funds, they asked themselves, for a double benefit-to get out scrap and rid New York of structural eyesores, and thus clear spaces for parks or playgrounds.

Hence it was announced to the world that the city would turn in buildings owned by it for scrap with the understanding that the government pay for demolition. Most spectacular item was the 22-story Hudson Towers, built as a private hospital project in the boom era but never completed or occupied. Also mentioned were old tenements seized by the city through condemna-

tion or for nonpayment of taxes. When the government did not jump immediately at this program, Moses resigned from his scrap post, declaring in effect that federal lassitude was the cause.

• Exit Hopwood-Moses didn't name names, but everyone recognized his statement as an attack on Hopwood's WMI. The WMI already was under fire from WPB groups which considered Hopwood's salvage program a duplication of their own. When the WPB last week "clarified" WMI status by shearing it of scrap-salvaging authority and reducing it to the status of a checkwriting office for the Conservation Divi







OCTANES VS. THE AXIS

To meet the ever-mounting demand of America's air forces for 100-octane gasoline, units like these are being multiplied rapidly. The intricate installation above, at a Standard of New Jersey refinery, is a "cat cracker," used in turning out base stock and blending agents for plane fuel. The

sphere with a stairway is a storage place for highly volatile products that are mixed during the last stages in the manufacture of the supergasoline. The impressive bundle of pipelines is part of a Standard refinery's circulatory system, distributing the various types of liquids that go into the 100-octane process. The man at the instrument board is studying high-altitude per-

formance of gasoline in a test room which makes ascent to the substratosphere unnecessary. At the lower right is the control room from which point a wide variety of switches, dials, gages, meters, and valves assist technologists in controlling temperatures, pressures, and flow rates that affect the quality of gas. From here, the whole fluid catalytic cracking process is directed.





20

Business Week • October 24, 1942

RYERSON Founded in 1842 Completes One Hundred Years of Steel-Service

November 1, Joseph T. Ryerson & Son, Inc. will mark its one hundredth anniversary, the completion of its first century of steel-service.

In 1842, men came to the little Ryerson store for iron to make horseshoes, axles and rims for wagon wheels. Today, there are ten great plants in as many key industrial centers.

In peace—Ryerson stocks supplement the tonnage required for production schedules, and meet all rush requirements for factory maintenance and repair.

In war—These stocks made possible quick change over to war production, and are now breaking bottlenecks—supplying emergency steel of every kind—to the factories that are speeding up the flow of war equipment to our men in the field.

For one hundred years—through peace and war—fires and floods—the nation has turned to Ryerson stocks for the quick shipment of steel for every purpose.

Based on this long successful record, we expect to serve with even greater speed and accuracy in the years to come.

JOSEPH T. RYERSON & SON, Inc., Chicago, Milwaukee, St. Louis, Cincinnati, Detroit, Cleveland, Buffalo, Boston, Philadelphia, Jersey City



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Tough Spot for a SPRING,

★ UNCLE SAM'S anti-aircraft guns make the skies a tough spot for enemy planes, but these fastfiring guns are also tough on their own component parts.

The recoil springs, for example, must absorb the terrific kick of powerful shells-function flawlessly in the intense heat generated by rapid, continuous action-and combat corrosion at all times. But Muehlhausen Springs are doing this jobfor they are designed to meet the most rigid requirements; have that extra strength and stamina to take a real beating.

If your product has a tough spot for a spring of any type-compression, extension, torsion or flat-wire or write-MUEHLHAUSEN SPRING CORPORATION, 775 Michigan Avenue, Logansport, Indiana.



sion of WPB, Hopwood promptly quit.

Meanwhile, government men were examining the buildings offered by New York City. Under close scrutiny they didn't look so good. Hudson Towers was found to be under litigation, which wasn't due to start till Nov. 19. No man could prophesy when or whether the lawyers would make way for wreckers. As to the condemned tenements, it was found that many were of wood and brick construction, with spindling fire-escapes as the most promising items to justify the heavy expense of wrecking. • Junkmen Disgruntled-While it isn't advertising the fact, the scrap industry doesn't like the way these civic drives are handled. Junkmen (the collectors with the wagons) are going out of business by the hundreds largely because they can make more money in war plants but also because a community drive dries up their scrap sources for six

Dealers with yards have to explain to irate patriots that piles in evidence are being sorted or are waiting for carload accumulation, hence are not being held for a rise in price. And steel companies are getting pretty tired explaining that they can't rush in and buy the unsorted tangles of junk in the emergency dumps.

Taming Wildcats

NWLB moves to stop all unauthorized strikes, will probe work stoppages, determine blame, and publicize its findings.

Satisfied that existing machinery has held the number of strikes officially supported by unions to an almost irreducible minimum, the National War Labor Board this week launched a program designed to reduce both the number and duration of unauthorized strikes.

• Three-Point Plan-NWLB's "wildcat

control plan" provides:

(1) All mediation panels and investigators acting for the board in cases where there has been a stoppage shall submit to the board a report on "the real causes of the interruption" and recommendations on methods of preventing its repetition "either among particular employees involved or in similar cases."

(2) The panel or investigator shall, if the workers are organized, give the board full information as to the "relation of the local union officers to the strike and their efforts locally and in cooperation with the international officers to prevent its occurrence.

(3) In all strikes, the panel or investigator shall give the board "a full statement of the relation of the management to the occurrence of the in-



ANTI-AXIS GIANT

One year, two days, was the construction time of Republic Steel Com's new blast furnace at Youngstown, Ohio. One of the world's largest, the furnace has a rated capacity of 1,100 tons of pig iron per day.

terruption of production and whether management has fully discharged in obligations to settle all grievances as promptly as possible."

 Publicity Weapon—Because success of the program depends at this point on the heat of adverse publicity, NWLB has indicated that it will make free use of its Washington sounding board. Those whom the board holds responsible for a work stoppage-whether management or labor-will be blunth charged with hindering the war effort. Employers with a walkout on their hands can now expect that NWLB agents will not only investigate the merits of labor's grievances but will also insist on knowing what steps have been taken to dispose of them. Similarly, the "reasonableness" of employees' actions leading up to a walkout will be carefully evaluated and blame will be publicly assigned in the degree to which workers failed to give management an opportunity to act on complaints.

If salutary results do not flow from the new noncoercive NWLB procedure, punitive sanctions are likely.

• Obligations on Both-In announcing the program, the board said that "the obligation of management not to take advantage of the no-strike agreement and the obligation of labor to live up to it are equally solemn war obligations." It called upon management to exert every effort to settle all grievances promptly, "going beyond the ordinary peace-time efforts." To labor, the board said that workers must realize that "no grievance, no matter how great" justified an interruption of production; every employee should see that disputes go to NWLB.

Bus



How TOCCO prolongs life of forging dies ... increases working efficiency



A 10" section of 10%" pipe (%" wall thickness) heated to 1800° F. in 75 seconds. TOCCO Jr. inductor coil makes possible uniform, localized heating for accurate forming of that section.



This TOCCO Jr. is located handy to related forming equipment. Cool, clean and compact, it provides good working conditions for efficient production. Doesn't require skilled labor.

Complete information in "The TOCCO Process" booklet. Free on request.

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World's Fastest, Most Accurate Heat-Treating Process

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here is one great advantage in doing business with a young company. They don't always know what cannot bedone—therefore, they do it! Clare engineers have never learned "it can't be done". They are most flexible in design and production ideas. Clare "Custom-Built" Relays are now being widely used in industry. This flexibility has been responsible for the remarkable growth of this company. C. P. Clare & Co., 4719 W. Sunnyside Ave., Chicago, Ill. Cable Address: CLARELAY.





107 E. Fayette St., Syracuse, N. Y

War Guests Next

Involuntary welcome mat a possibility unless home owners in defense areas make room for war workers.

Within the next nine months approximately 1,600,000 workers (many with families) will migrate to war plant areas, there scramble madly for a place to live. So critical is the housing situation that even on paper the outlook is discouraging.

• How It Stands—The National Housing Agency has put all its available statistics together, finds that things stand thus:

To care for the 1,600,000 migrants, 1,320,000 dwelling units are necessary. Some 850,000 such units must be pro-

Some 850,000 such units must be procured by expanding the capacity of existing structures.

About 70,000 units will accrue from new private construction.

Around 140,000 will be supplied by government-sponsored construction, completed or nearing completion.

An additional 260,000 will have to come

An additional 260,000 will have to come from public construction which hasn't progressed beyond the drawing-board stage.

• Involuntary Squeeze-Cramming weld-

ers, steelworkers, and shipbuilders in the homes of people who thus far hap preferred privacy to "war guests" is a simple task. Just as perplexing is the problem of getting materials to buil 260,000 new units, even though Congress seems in a mood to put up the \$500,000,000.

Requisitioning, commandeering, and billeting seems certain. But before the National Housing Agency takes that lad drastic step, it will try several stopes measures. One—urging voluntary conversion of facilities to house more persons—is in progress. Now three new programs have been added:

NHA is offering to rent private housing facilities and convert them to war use a no cost to the owner.

Public construction projects will be spe by substitute materials, other short-cuts.

Large structures—warehouses and of hotels, perhaps—will be purchased and on verted into dormitories.

• No Family, No Job—Refurbishing private dwellings at no cost to the owner is, of course, much more complex than buying an old hotel and turning it into a dormitory. But worker want to move their families with them With them it's, "no family facilities, no workers." So a new NHA division—Homes Use Service—has been created to



Dormitories such as those at Seneca, Ill. (above) and Vallejo, Calif. (below) are the Federal Public Housing Authority's partial answer to the housing shortage in war production centers. FPHA currently has plans for 136,000 dormitory dwelling units and has completed 22,000 to date. Rooms rent for

\$3.50 to \$5.00 per person per week in double rooms, \$5.00 to \$7.00 in single rooms. Construction of each dormitory unit, which consists of furnished bedrooms, toilet and shower rooms, and a lounge, costs about \$20,000. Fresh towels are furnished daily; clean bed linen twice weekly.

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Beneath the Surface a great deal more

The thin, glistening sliver of submarine as it breaks the surface, gives no hint of the bulging, deadly hull that lies below.

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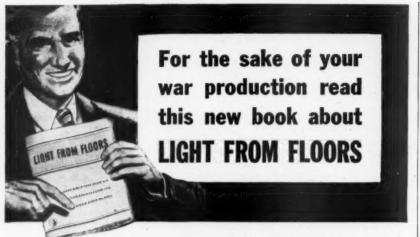
Invisible, also, are many parts that contribute to the safety and efficient operation of America's submarines, parts that first take form at Baldwin. From Baldwin's Standard Steel Works come bow diving planes that help subs dive and come up, fast ... stern planes that aid in keeping even keel ... heavy frame and rudder castings . . . rolled steel sections for conning towers. From still another Baldwin division-Cramp Brass & Iron Foundries-come propellers of manganese bronze that speed submarines on their way.

Baldwin divisions have received "E" awards for high achievement in the manufacture of these and other products. Baldwin has won many an unofficial "peace-time E" for outstanding improvements in steam, electric, and diesel locomotives, diesel engines, ship propellers, hydraulic presses, testing equipment, and scores of other products for American industries. And, from the great arsenal which is Baldwin today, flows a steady stream of army tanks, guns, gun mounts and other modern weapons to meet our nation's enemies on every battle front.



The Baldwin Locomotive Works, Philadelphia, Pennsylvania: Locomotive & Ordnance Division; Baldwin Southwark Division; Cramp Brass & Iron Foundries Division; Standard Steel Works Division; Baldwin De La Vergne Sales Corp.; The Whitcomb Locomotive Co.; The Pelton Water Wheel Co.; The Midvale Co.

Baldwin serves the Nation which the Railroads helped to build



White cement floors make sharper, clearer sight!

TO INCREASE illumination and speed production, Boeing, Douglas, Consolidated and North American aircraft companies build light-reflecting floors made with Atlas White cement. They are easy to install, save more than they cost, and are simple to maintain.

INCREASE QUANTITY AND QUALITY OF PRODUCTION

Survey shows they reflect 61% more light than gray cement floor in same plant. This increases vertical illumination, eliminates gloomy shadows, and lights under side and vertical faces of work. Because of better illumination, accidents decline, rejects decrease, output rises.

EASY TO MAINTAIN

The light color enlivens the worker's attitude, promotes morale, encourages cleanliness. Maintenance is sim-

ple—frequent sweeping, occasional damp mopping, periodic scrubbing.

FOR NEW OR OLD FLOORS IN ANY BUILDING

Light-reflecting floors built with Atlas White cement are valuable wherever illumination, production, sanitation and safety are important—in factories, food plants, hangars, warehouses, laboratories, offices and apartments—and in corridors, stair wells and basements.

▶ For full details see new book, "Light From Floors." Send for it. Use the coupon. Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York.

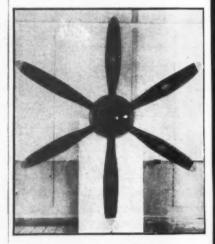
OFFICES: New York, Chicago, Philadelphia, Boston, Albany, Pittsburgh, Cleveland, Minneapolis, Duluth, St. Louis, Kansas City, Des Moines, Birmingham, Waco. lease and remodel residential facilities of all types. In some 50 critical areas, home owners may notify war housing centers that they are willing to have their premises revamped. If the facilities can be remodeled with a minimum of zoning and strategic-material trouble, and they are within reasonable transportation distance of war plants, Homes Use Service will lease the property and start conversion.

All expenses and charges will come out of the rents paid by the war-worker occupants. A reasonable time after the close of the war the owner will recover his property, but in the meantime he may live in his reconverted house as one of the tenants, paying rent like everybody else.

• White Elephant Stampede—It's problematical how many home owners will accept this offer. Early volunteers include a good many estates stuck with white elephant mansions and a few unoccupied smaller properties.

If this is all that results, the pickings will be far too slim. For instance, if every unoccupied property in Pine Bluff, Ark., were turned over to Homes Use Service, a maximum of 50 properties would accrue. That's not enough. On the other hand, Pine Bluff has 1,250 units (out of a total of 7,000) not occupied to capacity.

• Convert, Or Else—Hence, if the drive fails, NHA will start a program of commandeering. Plans providing the authority to put such measures into effect if



SIX-BLADED "FIRST"

When the new Curtiss-Wright six-bladed dual propeller is mounted on a high-altitude pursuit ship, three blades will revolve clockwise, three counterclockwise, to achieve 5% higher efficiency and to expel torque, or twist effect, of a standard single rotation prop. C.-W. says it's the first dual rotation design built with electric pitch control for the blades.

IF YOUR FLOORS ARE WHITE, YOUR PLANT GETS MORE LIGHT

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REFLECTING	Universal Atlas Cement Company Chrysler Building, New York, N. Y. Please send me copy of new book "Light From Floors."				
FLOORS	Name				
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MORE COSMETICS?

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The cosmetic manufacturer now can go ahead and turn out as much as he wants to—providing he can do it without using tight raw materials.

That's the purpose of WPB in wiping out its Order L-171, issued July 16, which placed production and sale of all cosmetics under a percentage quota based on 1941. The order provided, for example, that a cosmetic manufacturer could make and sell only the same poundage of lipsticks that he made or sold in 1941. In addition, he had to pack this poundage in 90% of the containers used last year. Other cosmetics were cut to 80% of 1941. The theory behind the original order was that raw materials could best be saved by imposing ceilings and cuts on all cosmetic production and sales.

Since then, WPB jurisdiction over cosmetics has been transferred to the Chemicals Branch, which is primarily a raw materials organization. Revocation of L-171 was based on the fact that the Chemicals Branch has placed virtually all the scarce raw materials used in cosmetics under individual allocation orders. Thus, control of cosmetic production has been removed from an end product to a raw material basis.

necessary are already being formulated.

Meanwhile, construction of new permanent and temporary shelters, dormitories, and trailers is being plugged by the Federal Public Housing Authority (another NHA branch). But the shortage of materials causes many a stumble, many a halt.

• Materials Stopper—Lumber lately has stalled progress. Brick and concrete are being substituted wherever possible. In other instances—at Bomber City (Willow Run), for example—buildings that started out as permanent structures will wind up as temporary shelters in the interests of gaining speed and materials. But even with such shortcuts, plus better priority ratings (AA-2, AA-3) from WPB, no one is willing to put all his chips on new public construction projects.

The qualms occasioned by the shortage of materials has caused many a planner to suggest that warehouses and similar large structures be partitioned into dormitories. Actually, this idea isn't as good as it sounds. Such structures lack heating and sanitary equipment, and proper installations may be difficult. But if worst comes to worst, NHA may have to tackle the ware-

houses.

Now You Have

19 SOURCES OF SUPPLY FOR PHILLIPS RECESSED HEAD SCREWS



AMERICAN SCREW COMPANY Providence, Rhode Island THE BRISTOL COMPANY Waterbury, Connecticut CENTRAL SCREW COMPANY Chicago, Illinois CHANDLER PRODUCTS CORP. Cleveland, Ohio CONTINENTAL SCREW COMPANY New Bedford, Massachusetts THE CORBIN SCREW CORPORATION New Britain, Connecticut INTERNATIONAL SCREW COMPANY Detroit, Michigan THE LAMSON & SESSIONS COMPANY
Cleveland, Ohio THE NATIONAL SCREW & MFG. CO. Cleveland, Ohio NEW ENGLAND SCREW COMPANY Keene, New Hampshire THE CHARLES PARKER COMPANY Meriden, Connecticut PARKER-KALON CORPORATION New York, New York PAWTUCKET SCREW COMPANY Pawtucket, Rhode Island PHEOLL MANUFACTURING COMPANY Chicago, Illinois RUSSELL, BURDSALL & WARD BOLT & NUT COMPANY Port Chester, New York SCOVILL MANUFACTURING CO. Waterbury, Connecticut SHAKEPROOF INC. Chicago, Illinois THE SOUTHINGTON HARDWARE MFG. CO. Southington, Connecticut

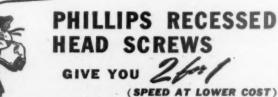
Your screw requirements can be met without delay — with genuine fast-starting, quick-driving, tight-seating Phillips Recessed Head Screws.

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"AND DON'T FORGET ... PHILLIPS SCREWS COST LESS TO USE!"

WHAT ABOUT DRIVERS? There are 44 sources of supply for PHILLIPS DRIVERS plus hardware and mill supply distribution.



WOOD SCREWS - MACHINE SCREWS - SHEET METAL SCREWS - STOVE BOLTS SPECIAL THREAD-CUTTING SCREWS : SCREWS WITH LOCK WASHERS

New Price Policy

Future adjustments under GMPR will be by industries or by commodities—not meted out on basis of individual pleas.

Individual price adjustments under the General Maximum Price Regulation will soon become a thing of the past. Except in rare cases of hardship, future . adjustments will be on a broad industryby-industry or commodity-by-commodity basis in cases where a showing of collective disaster can be made. This means that what is now Section 18 of GMPR (entitled, "Applications for Adjustment") will go into the wastebasket. · Crazy-Quilt-The coming revision of GMPR means, first and foremost, that OPA has been swamped with applications for relief but feels that piecemeal adjustments-some made in Washing-ton, some out in the field-are bound to result in a crazy-quilt of dizzier and dizzier design.

Important, too, is the fact that OPA is now ready to retire the fiction of March price-ceilings. Individual adjustment policies had perpetuated the fable of the March Santa Claus, but now that GMPR is six months old, OPA is ready to forget its original high-minded bally-hoo and get down to the facts.

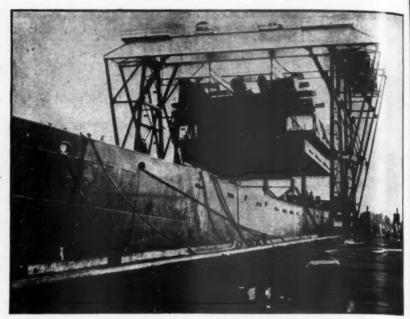
• Relief by Petition—Section 18 (as amended last September) entitles retailers to petition OPA or "any duly authorized officer thereof" for relief from abnormally low prices. If the petition mentions only a single retailer, or single chain, OPA can offer personal relief. If the petition indicates that not only the petitioner, but his colleagues and competitors as well, are squeezed, OPA can grant collective relief.

Furthermore, under the amended Section 18, petitions are also accepted from any person (meaning manufacturer, wholesaler, retailer) who can show "special circumstances" requiring alleviation.

Nobody knows how many petitions Section 18 stirred up. But the flood apparently has shown signs of getting out of hand.

• What's Coming Up?—Since OPA has not given any indication of what will replace the procedure that presumably is to be junked, the future can only be speculated upon. Something like this, however, seems to be in the cards:

With respect to processors and manufacturers, pressure will be eased by broad regulations covering a whole industry, or large segments thereof. The extent of such relief will vary in each instance, but the criterion will be that no more relief should be granted than is necessary to keep production at a suitable level. This means, of course, that where



TEN-DAY TECHNIQUE

Pretabrication is one of the secrets in record shipbuilding performance at

the Kaiser yards. For example, an entire 165-ton superstructure—complete to light bulbs—slips into place in one crane-load, ready for welders.

productive capacity is ample, the prices of the low-cost producers will be chosen (since the exit of marginal manufacturers would subtract but little from the supply). On the other hand, where marginal production is absolutely necessary, the price will have to cover marginal costs.

For Distributors Top—In the distributors Top—In the distributors Top—In the distributors.

• For Distributors, Too—In the distributive fields, the same criterion will be used. Relief will usually come only when it's necessary on a widespread basis. The sole exception would be in the case of local shortages (an increasingly bothersome problem).

From the long-range viewpoint, such changes portend (1) better control over adjustments, (2) fewer adjustments, granted only on the basis of collective hardship, (3) relief only to the extent that the flow of a commodity will not be interrupted, and (4) a continuation of the trend to fix prices in dollars-and-cents terms, principally at the manufacturing level.

 Retail Prices—Dollars-and-cents retail prices, however, are a growing possibility. Nothing has been done on this so far, because the retail trade is too hard to control, and each commodity has thousands of variations calling for thousands of prices.

The incidence of the so-called "victory" models, however, will change all that. These models will probably be assigned a standard nation-wide price. The consumer will then have a price-and-quality guide, will know when a black market operator is gypping him. This may not be the final answer to black market prices, but it's the best answer anyone has cooked up so far.

Industry Planners

Organization is set up by business men to carry out a program of long-term economic planning for private industry.

At the Boston Conference on Distribution, David C. Prince, vice president of the General Electric Co., reported on some of the work that G.E. has been doing to put into effect an elaborate program of postwar planning. He pointed out that, projected from a 1941 base date, the over-all postwar picture shows a period of readjustment the year after the war, but in the second postwar year the potential national income gives promise of zooming to \$135, 000,000,000 (at 1941 prices) with employment running to 57,000,000 persons.

• Looking Still Further Ahead—Should all this come true, believes General Electric, the number of its workers will remain at the January, 1942, peak (123,000). Some reallocation would be necessary, however, among G.E.'s 72 operating units. To get at this detail, the company is now working on further breakdowns, more minute data.

That other private groups have been thinking in this same direction, and starting their thoughts from the same focal point (national income and employment), became apparent last week when sketchy announcement was made of an unpublicized Committee for Eco-

FOR

... longer fluorescent lamp life
... greater lighting efficiency
... full use of your wiring system
... DEPENDABLE SERVICE

Specify fluorescent fixtures using



E. T. L. is not a brand but a mark of certification by one of the world's foremost electrical testing laboratories.

ETL CERTIFIED STARTERS and BALLASTS



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E.

car

nd

When you're planning fluorescent lighting for war work, or making occasional necessary replacements in older installations, it's important to make sure that fixtures use Ballasts and Starters tested and Certified by Electrical Testing Laboratories, New York—to assure dependable, trouble-free operation. These "control units" have more to do with the satisfactory performance of fluorescent lamps than any other part of the fixture.

E. T. L. Certified Ballasts and Starters are a specified part of every Certified FLEUR-O-LIER fluorescent lighting fixture. All FLEUR-O-LIERS, control

equipment included, are built to 50 definite specifications set up by MAZDA Lamp makers for the protection of the user, and for maximum light from the lamps, and are tested and Certified by E. T. L.

FLEUR-O-LIERS are made in various sizes and designs by over 45 leading fixture manufacturers located at important points all over the country. This means better service on war plant orders, which, of course, are now filled on necessary WPB priority rating.



This lubel identifies a genuine FLEUR-O-LIER. When you specify fixtures, be sure to look for it!





Something a Flyer Never Thinks of . . .

... yet without it be might not be flying!

Without that "something" there might not be enough man-made rubber for the tires on which his plane takes off.

Nor might there be enough high-test gasoline to give him an edge over the enemy.

Or enough TNT for the bombs he carries, enough Nylon for his parachute, enough magnesium for important engine parts.

For like countless other materials vital to our war effort none of these are *made* without equipment of strong, corrosion-resistant alloys.

Which is another way of saying equipment of Nickel and Monel in quantities so great that only through Lukens Nickel-clad and Monel-clad steel could the requirements be met.

With these remarkable bi-metals one pound of Nickel is made to do the work of five or even ten.

Consisting of a solid layer of corrosionresistant material permanently bonded by hot rolling to 4 to 9 times its thickness of steel, Lukens clad steel is economical to use, and substantially reduces the amount of Nickel or Monel needed for a given piece of equipment.

Manufacturers of equipment vital to victory, who may be fabricating these metals for the first time are invited to take advantage of INCO technical assistance. Write to:

THE INTERNATIONAL NICKEL COMPANY, INC. • 67 Wall Street, New York, N. Y.

INCO NICKEL ALLOYS

MONEL • "K" MONEL • "S" MONEL • "R" MONEL • "KR" MONEL • INCONEL • "Z" NICKEL • NICK

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 Proposes to Do Big Job—CED shapes up as by all odds the biggest postwar planning group yet sponsored by private industry. Its object is to provide for such a volume of employment and industrial output after the war that the oft-feared specter of ironclad government control will disappear.

To get at this objective, CED will spread from a nucleus of topnotch, planning-minded industrialists to regional, district, and local chairmanships. Participants will use planning techniques now being developed in cooperation with such agencies as the Department of Commerce, abetted by private and academic experts.

Capital Quizzes

Lubin committee dropped 20% of the questionnaires that haunted management and cut the rest to reduce red tape.

The flood of questionnaires from government agencies to war contractors has not been stopped, but it has been brought effectively under control, and the agency responsible for this turn of events envisions still further diminution of the flow.

• Quiz Forms Curtailed—Estimate of the WPB Committee for Review of Data Requests from Industry is that almost 20% of the forms which once haunted war goods suppliers have been climinated, and at least another 20% simplified. The committee's life has been extended to Dec. 31, the date by which all data requests emanating from official Washington must bear the symbol of the Budget Bureau.

In terms of executive and clerical man-hours saved in the sifting process and in dollars thus saved to the war effort, the estimates of the committee headed by Joseph I. Lubin run into astronomical figures.

• Mimeographers Disarmed—The Lubin committee attacked the multiple-questionnaire problem from several directions. First, it seized all mimeograph machines which might be employed to prepare a brain-twister. Then it turned off the stream of funds available to war agencies for supplemental printing and refused to permit expenditures for telegraphic data requests.

Standardization of all forms, as to size, type style, and paper quality met one of the most vigorous complaints from business management. It was not uncommon for a manufacturer to receive a questionnaire the size of a small window shade from one war agency, only to learn from another that he could not

Business Week . October 24, 1942

buy a wide-carriage typewriter with which to execute the enormous form.

• Time Factors Changed—In addition to eliminating duplications, the committee edited the remaining questionnaires and, in several important cases, adjusted the time of filing to correspond with the time a manufacturer might be assembling the same data for his own numbers.

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In one case, it was found that substitution of a quarterly for a monthly report saved the affected companies 20,000 man-hours a month. Through such a device, steel companies were saved some 150,000 entries a month in their PD-25-a applications for repair and maintenance authorizations. A change of ten days in the filing date of required reports proved a vital help to the rubber

• Budget Bureau Controls—Full effect of the Lubin committee's pruning and coordinating efforts will not be felt until the stock of older questionnaires is exhausted. Since Sept. 1, WPB has issued only forms bearing the approval of both the Lubin committee and the Budget Bureau. After Dec. 31, all forms must carry the Budget Bureau stamp.

Pending that, the committee is listing in the Nov. I issue of "Priorities" all forms of data requests which have been retained. Before executing any form not listed therein, companies have been asked to check with the committee (Room 5423 Social Security Bldg., Washington; telephone, Republic 7500, Ext. 71448).

WAR PRISONER RATIONS

After the last war Bob Widdicombe, who was an aviator in France, then a Red Cross man in Poland, started a date business in the California desert country. Until lately Widdicombe's, Inc., Los Angeles, did a good trade in brandied dates and like specialties. Now shortages are clamping down.

Keenly interested in war prisoners (because he has been one), Widdicombe saw possibilities in concentrated foods. With assistance from dietitians, he has designed a war prisoner parcel in an insulated box-board container, doubly wrapped and sealed. It is proof against weather, immersion, 120 degrees of heat, 40 degrees minus of cold. The parcel carries the permitted 11 lb. in one-sixth cuft. of shipping space—over-all dimensions 8\frac{1}{2}\frac{

In 30 moisture-proof pasteboard tubes, one to be opened daily, are packed dehydrated and concentrated meats, fruits, vegetables, milk, and vitamins, in wafers and tablets, to feed a prisoner one month, with essentials for keeping blood stream, teeth, eyes, and nerves in good condition. Each parcel contains three cakes of soap, three packages of tobacco, salt, and in every fifth parcel, a tube of malaria medicine.



"What they see... they GET!"

"WHAT you see; you get"—
for many years a tradition
with owners of FILMO personal
movie equipment built by Bell
& Howell—assumes a new and
tremendously important wartime meaning. The fraction of a
second can be the difference between victory and defeat in today's high-speed combat. Our
fighting men must be better
trained and better equipped than
ever before.

Motion pictures are proving indispensable to both tasks. Men in training learn faster through motion pictures—because what they see, they get. In combat, each engagement recorded by the eye

of the camera and re-enacted on the screen proves achievement and provides the key to building better weapons.

The craftsmanship of Bell & Howell which in peacetime made "what you see, you get" an honest slogan, is now providing our fighting men with the finest motion picture equipment and sighting devices American skill can devise.

Films

Bell & Howell Company, Chicago; New York; Hollywood;



MOTION PICTURE CAMERAS AND PROJECTORS

Bell and Howell

IMPROVED



It's WESTINGHOUSE for better light at lower cost

rat fluacl

in all 3!

1. Brightness

Through intensive research ever since fluorescent lamps were first introduced, Westinghouse has increased lamp brightness. This more-light-for-your-money advantage has been accomplished in many ways, for example: by making fluorescent powders which glow more brilliantly; by rigidly controlling thickness of the powder coating; by making lamps stay bright from end to end.



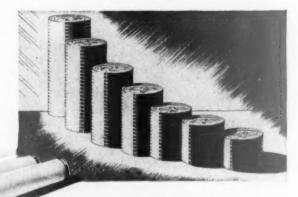
2. Long Life

Today's Westinghouse Mazda Fluorescent Lamps have a rated average of 2500 hours, or 1000 hours longer than the fluorescent lamps of four years ago. Westinghouse research achieved this advantage by many new developments, including improved electrode design; better control of gas pressure inside the lamp; and by perfecting the method and machines which insert the mercury into the lamp.



3. Low Cost

While many Westinghouse technicians were improving lamp quality, others were developing highly accurate mass production machinery to reduce lamp prices. As a result, Westinghouse Mazda Fluorescent Lamps are precision built to the most exacting limits, and now sell at the lowest prices in history. A 40-Watt Westinghouse lamp that formerly listed for \$2.80 now lists for only 95 cents!



Westinghouse MAZDA LAMPS



You are meeting rigid specifications in your war contracts because minute measurements mean lives. Your war product requires inspection that allows no margin of error. It has to be right and it has to be right every time.

Automatic electronic gauging is helping others produce for Victory. Eliminating friction, gauge-maker's tolerance, points of contact, the Electric Eye goes right down to tolerances of plus or minus .0000. The Electric Eye's inspection is identical on the first piece or the millionth. Light doesn't fatigue, gossip or wear.

The Electric Eye is adaptable to any problem involving weight, thickness, contour, finish, flow, color, speed, light, strength, height, depth — well, you name it! Whether it's a meter pivot or a tank turret, the Electric Eye automatically eliminates time-wasting production bottle-necks with complete, invariable accuracy.

Cut production costs — release workers for productive effort — eliminate the human element, gauge variables, and uncertainties.

We can adapt the Electric Eye for your use promptly — resulting in more economical, more rapid, more accurate automatic precision inspections. Submit your precision problems to us — now. There is no obligation.



Bulging Mails

Washington sets the pace for curtailment of deliveries, Business areas cut to two a day, residential zones to one.

The postman who traditionally always rings twice hereafter may be forced to buzz only once.

Like everyone else, the U. S. Post Office Department has noted the pinch of manpower and machines in defense areas. Recently a letter was issued to all postmasters who use trucks or make city deliveries advising them that (1) the shortage in manpower is sure to get worse, (2) no new trucks are available for the duration, (3) special collections should be abandoned, (4) the steps taken by Postmaster V. C. Burke of Washington, D. C. may be useful as a model elsewhere.

• Orders May Be Late—In general, such coming curtailment in postal services will affect the business-management man in that he may have to revise his office routine considerably. Whereas orders and memos from other offices have appeared regularly at the beginning of the business day, they are now apt to come in later, making the rescheduling of work advisable. (A complicating factor is that with fewer deliveries per day, the effect of late trains is compounded.)

Parcel post service, by and large, won't be affected. Deliveries on a one-a-day basis will be the maximum, already the case in many cities.

• Capital Mail Bags—Washington has been forced into the van of the conservation parade because the population in the past two and a half years has grown from 700,000 to 1,000,000. As an index of the strain on the postal system, registered mail has increased 80% since last year; special deliveries in some months have jumped as much as 50% over the year before; and postal cash receipts are up better than 20%. Meanwhile one-tenth of the post office's 3,100 mail handlers has been lost to the armed forces, and about 50% is subject to future call.

Therefore Washington is curtailing mail deliveries in business areas from three to two a day. This makes morning deliveries about an hour later, since the letter carriers now wait on all important morning trains before starting on their rounds. Deliveries in residential areas, including business firms located there, are reduced to one a day (75% served in the morning, 25% in the afternoon).

• Some Boxes Removed — Collections are uniformly limited to four a day. Special pickups in the business district are cancelled, and all letter boxes located inside of buildings without being



A Widely Known Name Backed by a World of Experience

All Bohn plants are operating at full capacity on war work. Bohn engineers, metallurgists and research staffs are gaining new and rich experiences which are proving of great importance to our vital war production. Bohn has developed new and better methods of producing various aluminum, magnesium, brass & bronze products as well as aircraft-type bearings. All of these Bohn products are known throughout the world for their high quality and many economic advantages.

So we want you to become better acquainted with the name BOHN and the products that bear this well known mark of distinctions

Maybe sometime in the future, Bohn can make a part or a product for you and make it better, at less cost. Some day we hope you will give us careful consideration, for we believe you will find it advantageous to do business with the Bohn organization.





BOHN ALUMINUM AND BRASS CORPORATION GENERAL OFFICES—LAFAYETTE BUILDING DETROIT, MICHIGAN

Designers and Fabricators

ALUMINUM - MAGNESIUM - BRASS & BRONZE

AIRCRAFT-TYPE BEARINGS

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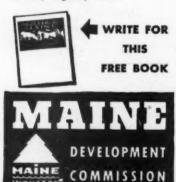
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Maine has many advantages which are not apparent to the average business man. He thinks of Maine as "tops" for vacation land. He doesn't realize that scores of successful industries have settled and prospered in the Pine Tree State.

- · In order to tell Maine's industrial story, a new, comprehensive book has been prepared. It gives a quick glimpse into the ideal labor situation in Maine. It lists the natural resources. It shows the favorable tax set-up. It illustrates the rapid transportation facilities which take Maine products to the heart of the eastern market overnight-by rail or road.
- · Actually, there is a combination of industrial advantages in Maine which cannot be matched anywhere else in the country. This free book -"Industrial Maine"gives you an accurate picture of Maine as a place to locate business. Write for your free copy. Address the Maine Development Commission, Room 10-B, State House, Augusta, Maine.







AIR JEEP

War work has been found for the flivver plane, long scorned by military services. These unarmed mosquitoes are being used for artillery liaison in Europe. Unlike fighting ships, they can be moved knockeddown on trucks, are easily reassembled, can take off from rough fields.



attached to chutes will be withdrawn. Residential letter boxes are limited to traffic thoroughfares. Those located on byways have been pulled out-some for storage, others for shipment to cities needing additional postal equipment. Collections from chute boxes in apartment houses have been crossed off the regular pickup schedules. The only pickup there will be made by the letter carrier as he comes around for his daily

All in all, Washington is expecting to save the work of 150 men, and lop 700 miles daily off the routes of its 245 trucks. If this manpower saving eventually is still too slim (as it may be), women will be pulled into the postal system to make up for the labor short-

• Superservice Cut-However, Washington thus far has not requested curtailment of special delivery letters, deeming them a necessity. Deliveries are still being made within 90 minutes of receipt of the letter at the post

The big chopping has been in superservice. And this will generally mean that the executive, in the nation's capital, must arrange his business schedule to allow for later deliveries of orders and instructions, plus whatever additional delay may occur because of late trains. • Detroit, Too-Collections and deliveries in Detroit residential areas were cut to one a day. In business areas three deliveries were scheduled instead of four at most points, but collections continued on much the same schedules. Postmaster R. B. Huston estimates the curtailed schedules would save 600 miles of automotive travel per day, and would reduce manpower requirements by 20%.

A Loan Problem

Federal officials worry lest savings-and-loans sell too much stock, winding up with excessive liabilities.

Compared to the bleak soil that the nation's 7,000 home-financing institutions were scratching eight years ago, they now are in clover, knee-deep. Happily, they have seen their assets increase by half a billion dollars while investors keep pounding on the door to buy more

• Time to Watch Policy-But now the government is unofficially-yet nonetheless emphatically-beginning to frown. Sober officials of the Federal Home Loan Bank System (comparable to Federal Reserve for their home-financing member institutions) have warned, by word of mouth and in correspondence, that unless investors are persuaded to buy war bonds instead of home-loan stock, a rude awakening may be in the offing.

As every beginner's textbook on the subject preaches, the capital of a bank is a liability (because it's owed to the stockholders). Loans are the big assets (because they'll come home to roost with interest). As the situation now stands, many home loan banks are really piling up liabilities without being dead sure that loans will increase commensurately, although the conservatives have stopped offering their stock for sale. • Hard to Call a Halt-Competition is so keen in the home-loan field that many institutions hate to see a prospective

Busi



couldn't help "blowing up". Here's the spot I was in. With a plant running 24 hours a day on war orders, I got word that one of the departments faced a shutdown for lack of material.

When I found that an office mistake was at the bottom of the trouble, I called in the office manager to make sure that it wouldn't happen again. I even suggested that we get more help if he thought we needed it.

Wilson said he was sorry and would try to correct the trouble, but didn't I think we ought to have the office sound-conditioned—that it was noisy!

That's when I exploded! I'm talking about an important war order and a production schedule that was almost ruined by a mistake. And he talks about sound-conditioning!

I had to hand it to Wilson, though. He came right back with a good answer. He had gathered some surprising facts on how noise caused mistakes and errors just like the one we were talking about. And how sound-conditioning would not only stop them but speed up the work and eliminate employee absences, too. Before he got through, he convinced me we ought to put it in.

He called in the Celotex people and they sound-conditioned every office in the place,

including my own. I want to tell you it's great! So good, in fact, we're going to have it in the factory, too. Oh, I know what you're going to say—"Maybe if we had a few more 'nutty' guys like Wilson, we'd win the war sooner." And you'd be right!

2 2 1

In offices and factories engaged in war production, Celotex Sound-Conditioning is proving its value—making a vital contribution to increased efficiency. On other "home fronts"—in educational and training centers, as well as in hospitals, churches and recreation buildings, Celotex Sound-Conditioning is promoting accelerated effort, greater comfort, better hearing. And it can still be obtained without a priority order.

Without obligation, the Celotex Sound-Conditioning representative in your territory will make a survey of your problem. He will explain how modern, permanent sound-conditioning materials can be quickly applied to your present ceilings without interrupting your routine. He will tell you what can be accomplished and what it will cost. A note on your letterhead will bring him to your desk.

FREE! Learn how Celotex Sound-Conditioning is contributing to greater comfort, better acoustics, improved efficiency, in all types of buildings. Read actual case records. Write for "Quiet Forum". Free on request. The Celotex Corporation, Chicago, III.



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webster electric leletalk

will prevent costly errors

... And Graybar can prevent mistakes in choice of equipment

The strategic location of Graybar houses, plus Graybar organization and choice of lines, make Graybar houses the logical source of supply for Teletalk Amplified Intercommunication Systems as well as many other items.

Graybar sells Teletalk because it believes it to be the best amplified
intercommunication system on the
market today. And because Graybar
men are familiar with Teletalk, and
its range of models and capacities,
they will save you time in buying a
Teletalk system. Tell them your requirements. They will confer with
you as to the type and size of system
that your business requires, and they
will see to it that it is properly installed for you. Call the Graybar
house nearest you.

Graybar Electric Company, Inc. Graybar Building, New York City



stockholder's money go to a competitor. Furthermore, loan-making has been soothingly brisk. Something like a billion dollars worth of mortgaged property (a depression hangover) was retired in the past two years. In the liquidation thereof, refinancing often was necessary, and the home-loan institutions got a nice share.

Government officials agree that things look pretty now—but that it's better to be safe than sorry. For one thing, the interest rates in the home-loan field aren't what they used to be—it's now 4% or 5% as against the old 7% and 8%. For a second, building of new homes has been practically stopped. Still another, the home-loan institutions borrowed about \$350,000,000 of government money in the bad years. When,

hint the officials, will this be paid back

Orders of the Day—So Federal Home
Loan officials have politely been advising the home-loan people (1) not to
pay stockholders more than 21% interest, (2) to retire government indebtedness, and (3) to sell war bonds to
prospective stockholders.

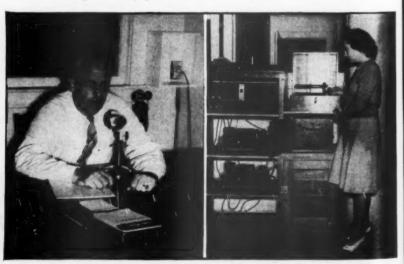
By way of model, the National Housing Agency has been publicizing the record of the Michigan and Indiana savings and loan associations affiliated with the Federal Home Loan Bank System. In the first eight months of 1942, the members in the Michigan-Indiana district paid off \$2,263,000 on their government advances, purchased \$8,094,000 in government obligations for their own account, and sold \$8,424,000 in War Savings Bonds to the public



KEEPING UP WITH THE WORLD

When employees of the Lamson Corp., Syracuse, N. Y., take advantage of regular ten-minute rest periods twice daily, whether they are snatching a bite in the company cafeteria (above) or stretched out on the lawn in front of the plant, they get music,

news or announcements about plant operations from Works-Manager H. G. Reynolds (left, below). The company's new public address system (right below) can be connected with any of the major networks. Most popular listening time is from 9:30 to 9:40 in the morning when from 100 to 200 employees visit the cafeteria.





HAVE YOU SOME Errors IN YOUR BUSINESS?

This sounds like a silly question. But is it? There are errors in every business. But today those errors in business are too costly to be permitted. They are not costly only in the sense of dollars. But they are costly in the delays in the production of planes and tanks and guns, and other war materials, because an error made in your own business may delay the shipment of an entire train-load of arms which are badly needed somewhere on the other side of the world.

Teletalk will eliminate many of these costly errors, because with it you can communicate so fast-in about three seconds—that you can very often correct errors before they reach the vital stage.

There are so many things that you can accomplish by having Teletalk in your office and plant. You can catch a shipment that someone has informed you through Teletalk has been misdirected. You can cut costly time-consuming conferences because with Teletalk you can confer with all of your associates and department heads. And you can conserve their time and energy as well as your own,

This applies to every keen individual and department in your business and enables you to secure information, issue instructions, investigate procedures, keep your finger on production and engineering, right at your desk by the flip of your finger.

Teletalk is not expensive. It can be fitted to any intercommunication problem you have. It can be laid out to meet specific needs. You will find it to be extremely dependable, and the maintenance cost will be negligible.

Our major responsibility lies first with the government and then to those with proper priorities.

By consulting your classified telephone directory you will find a Teletalk distributor listed as shown below. He will study your needs, plan a system to meet those needs, and install it for you quickly and efficiently. If there is no Teletalk distributor near you, write us and we will see that you are contacted by the right man.



WEBSTER W



ELECTRIC

"Where Quality is a Responsibility and Fair Dealing an Obligation"

Business Week • October 24, 1942

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DURING THE WAR AFTER THE WAR



has what manufacturers need

THERE is security, economy and profit for industry in the State of Indiana—in maximum degree in war or in peace.

Indiana is geographically the center of almost everything any manufacturer needs—primarily materials and markets... Also, Indiana manufacturers are removed from congested labor areas and the seaboards.

In your post-war planning you'll find our 20-page illustrated Data Book helpful and interesting. It gives the facts about Indiana's many industrial and living advantages.

Yours with our compliments. Also a record of vacant factory space currently available throughout Indiana. Write us. All inquiries confidential.



This Book Will Help Your Post-War Planning

DIVISION OF STATE PUBLICITY C-522 Board of Trade Building, Indianapolis

J. H. Albershardt, Director

BUY more WAR BONDS!

TO SPEED WAR EFFORT

Manufacturer Offers Following Facilities

- 1. Liquid Storage
- 2. Pumping Equipment
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- 4. Grinding and Pulverizing Equipment for Dry and Wet Materials
- 5. Liquid and Paste Filling Equipment for all Containers
- 6. Own Rail Siding

Willing to help produce shortsupply items on any reasonable basis. Write your requirements in detail to

FS-323, Business Week 330 West 42 St., New York City

Gyps Make Hay

These days of shortages are great for the crooks. They clean up on battery "dope," fake tires, and gasoline pills.

Since the country is short on goods and long on spending money, authorities look for an increase in merchandise swindles. New York state's attorney general and Democratic nominee for governor, John J. Bennett, recently warned against security-frauds based on war developments. He expects the unwary to be trapped by "elaborate schemes for growing domestic rubber or making substitutes for rubber."

• "As Good as New"—Better business bureaus are on the lookout. Already the "battery dope" racket has grown to the point where the National Better Business Bureau has issued leaflets warning against it. Promoters are becoming extremely active with chemicals to be added to automobile batteries. It is claimed that they rejuvenate old batteries, make recharging and starting troubles almost obsolete.

None of the dopes materially improve performance and some are downright harmful. Battery manufacturers have announced that use of dopes will be grounds for canceling their guarantees.

• Beware of Gasoline Pills—Barkers and pitchmen are raucously peddling gadgets for carburetors and pills to be dropped into gasoline tanks on promises of 20% to 40% better mileage. These are old-timers. Authorities are repeating once more that no known stimulant of this sort will improve gasoline.

Tire fakes are numerous. On the West Coast, swindlers put worn-out casings into hot molds thereby cooking and moulding the remaining film of rubber into the semblance of a serviceable tread. When painted the job looks like a good buy but often the tread rubber is less than it of an inch thick. It separates from the carcass in a few miles.

• Sight Unseen—In other cases, a tire bootlegger shows his victim a pile of paper-wrapped casings. He rips the cover off one disclosing a good new tire. But after the sucker has bought a set at a high price he discovers that the only good tire was the one shown.

TOURISTS TO WAR WORKERS

One area crowded with war work which is finding a pleasant relief from the housing stringency that is taxing most of big production centers is Los Angeles. Reason: the dropoff in tourists. Thousands of furnished apartments formerly let to tourists by the month, week, or day—in fact, half of these facilities—are now vacant.



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BRISTLES WANTED

Add to a long list of pork byproducts the new and highly profitable item of bristles—formerly imported at an average rate of 6,000,000 lb. annually. Now the Department of Agriculture is urging farmers to save the $3\frac{1}{2}$ to 4-in. dorsal bristles which are worth up to \$5 a lb.



The housing supply doesn't quite fit the demand, however, for many of these apartments were formerly not rented to families with children, while most war workers have to find accommodations suited to children. The answer doesn't lie simply in taking down the "No Children" sign. Tenants as well as landlords would be unhappy in the tourist apartments if they were rented "as is." Furniture and decor in apartments designed exclusively for adult occupancy are likely to be light, dainty, and definitely unsubstantial.

So landlords are undertaking an ambitious program of alteration and redecoration, fitting properties to the present

market.

Bonded Strategy

Distillers maneuver with OPA to keep liquor proof in line with price cuts as ingredients become scarce.

Because highballs will soon have more water and less alcohol, OPA is taking steps to adjust prices accordingly. In this vein, a ruling made recently ordered the price of Paul Jones and Four Roses cut proportionately to a cut in proof from 90 to 86 (New York State only).

• Eyeing Future Taxes—Liquor manufacturers, of course, are making these changes in the proof of their product to conserve valuable ingredients, and also to have a lower price base on which to pile expected new taxes. On the other hand, a good bit of this strategy thus far has been confined to New York State alone.

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New York is the nation's biggest, most competitive liquor market. It is more sensitive to price adjustments than just about any other area. But as things stand now, most manufacturers hate to give a low price and still dish out the same product. Hence the cut in proof, as exemplified in the Four Roses and Paul Jones move.

• OPA's Chance—In fact, these two brands dropped from 90 to 86 later than several others, wherefore they had no March price base and had to get an OPA ruling. This allowed them to fall in line with their colleagues, and at the same time gave OPA a chance to demonstrate how proof reductions will be treated by the government.

There is another angle to the situation. The 17 monopoly states—which sell liquor through state-owned stores—demand a price as cheap as any on the distiller's books. Thus when a distiller cuts prices in New York, he theoretically has to cut in the 17 monopoly states. But—and here is where the strategy fits in—if the distiller accompanies his New York price reduction with a cut in proof, he doesn't have to change his prices in the monopoly states inasmuch as quotations there are generally based on 90 proof.

• Demand Spurs Shrewdness—A few

years ago, such fine points in figuring prices were unheard of. The liquor market was so competitive, so flooded with products, that many a neat angle had to be overlooked. But today, when stocks are as valuable as gold, distillers have the opportunity to do business shrewdly.

Thus New York has easy prices, as customary, but only at the expense of lower proof. In other states, distillers are generally leaving prices and proof where they were. Reason—other areas

traditionally have somewhat higher prices, and profits are fractionally bigger at 90 proof than at 86 proof.

• Strategy Vulnerable—However, this situation won't last forever. If and when new taxes come, and as stocks grow scarcer, proof will be cut elsewhere, too, automatically killing some of the strategy now possible.

Meanwhile, New York's new Hollowell Act—which regulates discounts and forces the posting of prices—is theoretically in effect, but remains a virtual dead letter. For the Hollowell discounts are sometimes different than the discounts generally in effect in March, thus causing the state law to run afoul of the General Maximum Price Regulation. OPA subsequently has ruled that where there is a conflict between the two laws, GMPR prevails.

High-Protein Flour

Agriculture Department experts look to record soybean, peanut, and cottonseed yields for mixes to add to wheat.

To offset the meat shortage this year's bumper crops of oilseeds offer means of overcoming any deficiency of proteins in the national diet. Soy flour—also peanut flour and cottonseed flour—will do the trick if the public supports the Agriculture Department's plan to enlist the cooperation of food processors in adding these flours to bread, sausage meat (frankfurter type), macaroni, cereals, and corn meal.

• Some Advantages—Soy flour and peanut flour are high in easily digested proteins, minerals and vitamins. Geographically the crops are right from a transportation standpoint, soybeans being a northern crop and peanuts a southern crop.

The flours are a byproduct of the manufacture of oil by the expeller mill, hydraulic press, or solvent processes. Soybeans are cracked, steamed and dried, dehulled, and then the germ is removed. High fat soybean flour is made from the split bean meats while low fat flour is made from the cake after the oil has been removed from the bean meats.

• Flavor Problem Licked—Nutritionists have long known that the country need have no particular fear of a shortage of proteins but it will be necessary to get the public to modify its dietary habits. This may be difficult because only in the past few years could these flours be produced with a satisfactory flavor.

Their nutritive value also has been questioned by the public. The weight of scientific investigation now is added to facts long known in other parts



at the 3/4 mark

3rd among all magazines in advertising volume, first 9 months of '42 (P.I. figures)

MAG	GAZINE	PAGE
1.	Time	2,01
2.	Life	1,95
3.	Business Week	1,76
4.	Post	1,67
5.	Newsweek	1,22
6.	New Yorker	1,20
7.	Collier's	1,14
8.	Fortune	96
9.	Mademoiselle	91
10.	Vogue	83

Good evidence that Business Week is proving to be "one of the most useful magazines in America today."



of the world concerning these highprotein flours. Dr. D. Breese Jones, of the Department of Agriculture, reported at a meeting of the American Soybean Assn., Lafayette, Ind., on Sept. 15, that mixtures of soy flour and patent wheat flour tested by him show that by using 15% by weight of either soy flour or peanut flour the nutritional values are increased beyond that of either flour

Best results were obtained by Dr. Jones with a mixture of 15% by weight of soy flour with wheat flour. Under laboratory conditions the rats used in the test gained about six times as much when fed on the mixture as they did when fed on regular white flour. The gains registered when peanut flour was used closely approached those recorded when soy flour was used.

• Bakers Mix Their Own-Bakers enlisted in the government's program will be asked to add only about 5% of soy flour as a larger portion will produce a different-tasting loaf than the regular white flour loaf. This concurs with the recommendation of the National Soybean Processors Assn. American Bakers Assn. has been experimenting with soy flour. Wheat flour millers are not concerned as bakers will do their own mixing.

The government's program doesn't extend to the use of mixed wheat and soy flours for home baking. Baking characteristics of the blended product vary sufficiently from white flour to complicate matters in the kitchen. Plans call for sale at retail, particularly in the South, of a mixture of corn meal and soy flour. Meat packers and macaroni manufacturers, like the bakers, will do their own compounding.

The soy flour industry has been given great impetus by purchases for lend-lease and the Agricultural Marketing Administration's school lunch program A few years ago total yearly sales of soy flour, grits, and flakes were only 25,000. 000 lb. (5% of the industry's capacity). Last year's school lunch program alone took 5,000,000 lb. of dehydrated soups which contained 25% of soy flour or

• Sales Volume Grows-Lend-lease purchases from July, 1941, to Aug. 1942 of soya products totaled 61,000,000 lb. This, combined with increased domestic demand during the past year and initial purchases by the Army, indicate a total production of about 100,000,000 lb. of

soy flour, grits and flakes.

As an important method of gaining wide consumer acceptance for soy-containing food products, consideration is being given to placing them on the food stamp program. Wider use of soy products in the school lunch program also is probable because of the tendency toward protein deficiency in family meals due to the reduced meat supply.

Repair Problem

Householders who demand service on appliances run into shortage of repairmen and a dwindling supply of parts.

Repair for the nation's electric appliances is becoming more pressing every day-and getting the work done is just as rapidly becoming increasingly difficult. Scope of the problem is best demonstrated by figures on the numbers of electric appliances in use.

• Estimated Numbers-Recently in Mc-Graw-Hill's Electrical Merchandising, B. W. Clark of Westinghouse Electric & Mfg. Co. gave these estimates of the number of electric appliances now in use in the country's homes:

20,000,000 refrigerators.

3,500,000 ranges.

19,000,000 washers and ironers.

16,000,000 vacuum cleaners.

1,000,000 water heaters.

16,000,000 toasters.

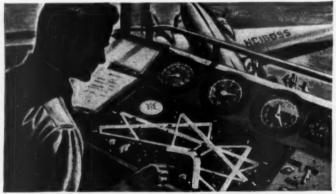
15,000,000 fans.

36,000,000 radios.

90,000,000 misc. and small appliances.

On a local basis, a recent survey showed that the average home in Indianapolis had 81 appliances. • Demand and Supply-The public is





At Washington National Airport

... traffic control is directed from this panel, marvel of scientific efficiency. Equally efficient is the airport's system of microphones and amplifiers, giving wings to words. Pictured below is similar OPERADIO equipment doing 24-hour duty on the war production front . . . conserving executive time and speeding operations on supplies for the fighting front. Write Operadio Manufacturing Co., Dept. B-7, St. Charles, Illinois. Export Division: Operadio, 145 West 45th Street, New York City.



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Business Week • October 24, 1942

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How can we eliminate auxiliary brake boosters?



America needs more of everything—and faster! Why carry over braking inefficiencies into new machine designs? Slipping brakes, incapable of taking power overloads without booster equipment slow up production, result in tremendous waste of materials and man hours.

HOW IT ELIMINATES AUXILIARY BOOSTER The extraordinary torque of the Magdraulic Electric Brake is developed within the brake itself eliminating the need for auxiliary booster equipment. As in the case below the compact Magdraulic design takes half the space required by other types of brakes. Despite their terrific braking force Magdraulics are simple in operating principle and easy to service.



Before you freeze designs on new machines or automotive vehicles write for data units on the Magdraulic Electric Brake.

EMPIRE ELECTRIC BRAKE CO. . NEWARK, N. J.





STREAMLINED SPARES

Carried outside the plane and completely streamlined in shape, a new auxiliary gas tank, developed and put in mass production by United States Rubber Co., is expected to increase materially the range of American bombers. The tank is so designed that the pilot may drop it after using its fuel, thus removing any impediment to the ship's maneuverability. Converted tire machinery was used in developing the tanks. rules

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calling for more service and checkups, showing the popular realization that adequate repairs must be made in these days when new appliances are getting scarcer and scarcer. But how well are dealers prepared to meet this increasing responsibility?

In St. Louis, the Union Electric Co. canyassed the situation and discovered that, out of 413 dealers selling appliances, only 212 repaired them or acted as agents for repairs. The rest just gave service a brushoff. In Hartford, Conn., Arthur P. Hirose of McCall's Magazine found that only 6 of 28 dealers were equipped for general service work, 8 could care for only one or two products.

A limited number of dealers are equipped to make repairs, and they are further handicapped by these problems:

further handicapped by these problems:
(1) War industries have been particularly active in gobbling up trained service men. Mr. Hirose found the Fore River shipyards paying \$85 weekly to men who carned \$40 in service departments. In Milwaukee a flat \$5 weekly increase was handed out to all service men in an attempt to hold them. In many instances departments have been reduced to the proprietor himself and kid helpers.

(2) St. Louis dealers declare that, on the average, they had only enough repair parts in stock to run them from 3.3 to 3.8 months; fully 40% of the parts needed are not to be had from local suppliers. Maytag, largest washer manufacturer, was coaching dealers on how to adapt old parts to repair work.

(3) The appliance field has always

been a large user of trucks, cars, and trailers, but the difficulty in pickup and delivery is growing due to the tire shortage. Customers now are asked to bring in all portable appliances.

(4) Service charges are a big problem. Inasmuch as the service department has always been considered a goodwill or prospect builder, it has never been a money maker. One manufacturer has given away \$25,000 worth of parts yearly as advertising. Profit on service is barred by OPA's freeze on charges, as of last March, when service was on a loss basis. This order will cause more establishments to throw in the sponge than anything else.

in the sponge than anything else.

• Another Blasted Hope—Rebuilding and reconditioning used appliances promised to give dealers coffee and cakes money during the war, but again the Henderson organization has slapped on ceilings, based apparently on the profitless setups of the past, when reconditioning was merely a method to get rid of used merchandise. Today, merchants prefer to let old stuff gather dust rather than work at a loss.

So, as conditions tighten, the stage is set for trouble in the mechanized home. Families in outlying towns and rural areas already are hit. National brands "guaranteed for 5 years" often have no one locally to make good for them.

• No One to Fall Back On-Distributors, cut off from new merchandise, are clearly in no position to save the day. The utility, to whom the hapless householder wails, has long ago ceased trying to service everything electrical.

46

WAR BUSINESS

CHECKLIST

The Week's Orders

A digest of new federal rules and regulations affecting priorities, price control, and transportation.

- Services—All services are now specifically included under the adjustment provisions of the General Maximum Price Regulation. Up to this week, these provisions, which authorize OPA to adjust ceilings which are far enough out of line with those of competitors to cause substantial hardship have applied specifically only to ceilings on commodities, although OPA had been acting under their authority from time to time to adjust inequities in service ceilings. (Amendment 3 to Regulation 165, as amended.)
- Food—An amendment to the alternative pricing formula which was designed to ease the squeeze on food wholesalers (BW—Oct.17'42,p16) specifically excludes from its provisions food brokers who might attempt to pose as wholesalers by taking title to foods which customarily pass through their hands as brokers. (Amendment 1 to Regulation 237.)
- Construction—The Federal Public Housing Authority has authorized contractors on war housing projects to increase the work week beyond the 40 hours now called for in contracts, and will reimburse them for the amount of overtime pay involved.
- Carbon Black—All deliveries of furnace-type carbon black in excess of 100 pounds a month have been placed under complete allocation control. Consumers who do not qualify for allocation will still be able to get channel carbon black and lamp black which are not covered by the order. (Order M-244.)
- Malleable Iron Castings—Price ceilings have been established at the level prevailing for the same or substantially the same casting in the first half of October, 1941. If specific castings were not sold during this period, then the pricing methods, costs, and profit margins used at that time will be used to determine the ceiling. (Regulation 241.)
- Prunes and Raisins—OPA has announced specific dollars-and-cents max-

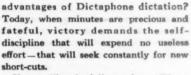
his is no time for time-wasting methods

To win this war we've got to tighten up—toughen up. We've got to do in one hour the work of three. Old habits of slackness and self-indulgence must go—in the office as in the shop. We Americans

have developed the methods. Now let's

use them!

For instance: how many of you users of Dictaphone dictating machines have ever realized to the full all the time-saving



If you will make full use of your Dictaphone, work will flow more amouthly throughout your entire organization. Check your own methods on the list below:



☐ Dictate whenever you please without requiring the presence of a secretary ☐ Give oral
messages to your secretary via Dictaphone \Box Protect yourself against interruptions by leaving
your secretary free to intercept phone calls and visitors \square Use your Dictaphone for flash ideas
Don't interrupt your associates needlessly—dictate memos instead Donfirm telephone
calls, oral instructions and reports by dictating to your Dictaphone on the spet \Box Put con-
ference high-lights on record \square Take your Dictaphone home and on trips—it's a "second
secretary" always ready to go wherever and whenever you want.

HELPING TO WIN THE WAR IS DICTAPHONE'S NO. 1 JOB TODAY



 To Dictaphone Corporation has gone the difficult task of making the precise and intricate mechanism required in the U. S. Army's remote control firing device for anti-aircraft guns.

This ingenious device enables the guns to get into action with deadly accuracy and almost incredible speed. Thus the skill and precision developed in the manufacture of Dictaphone dictating machines are now contributing to the greatest task in all history.

Today, Dictaphone is also making Electricord recording-reproducing equipment for the U. S. Army, the Navy and other essential war services.

DICTAPHONE

ACOUSTICORD DICTATING EQUIPMENT ELECTRICORD RECORDING EQUIPMENT The word nictaphosa is the Registered Trade-Mark of Dictaphone Corporation, Makers of Dictaing, Machines and Accessories to which said Trade-Mark is Applied

FREE CARTOON BOOK Shows uses for the Dictaphone you probably never thought about. Mail the coupen and we'll mail the book.



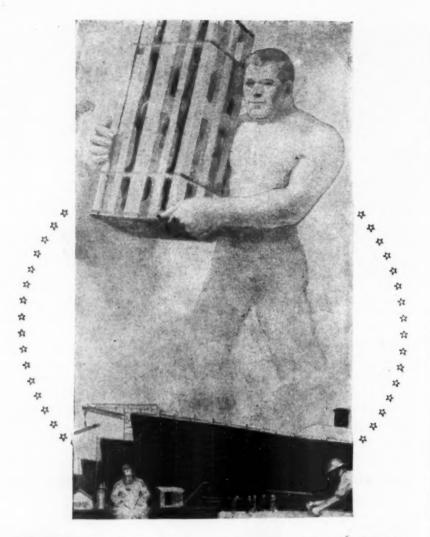
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Please send me your free cartoon booklet.

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Address

Business Week • October 24, 1942



VICTORY depends on TRANSPORTATION



plants is a vital link in transportation of goods on time or ahead of schedule. Squads, platoons and companies of Mobilifts are enlisted for Uncle Sam... moving goods 24 hours a day... helping to speed the day of victory, when industry will take on its next big job—production for peace. Vaughan Motor Company, 843 S. E. Main St., Portland, Oregon.

Get behind the Treasury's 10% plan. Urge every employee to earn a 10% button. Keep the T Flag flying over your plant.

MOBILE E Moves materials like a Giant! imum prices on dried prunes and raising for growers. These ceilings are the same as the Department of Agriculture's buying support prices, and represent approximately 110% of parity. (Regulation 242.)

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- Rubber Footwear—When rationing of men's rubber boots and rubber work shoes went into effect Sept. 30, OPA permitted mail order houses to fill orders dated prior to midnight Sept. 29. That special provision of the order has now been withdrawn and sales can now be made only on surrender of a ration certificate.
- Mining—To further expedite mining operations, WPB has raised the preference rating on maintenance and repair materials from A-1-a and A-1-c to AA-2X, and on operating supplies from A-1-e to A-1-a. The AA-2X rating may be used for the mines' full quota of repair and maintenance materials; as a further concession the quotas themselves have been revised to place all materials included in the metals list of Priority Regulation 11 on a pound basis instead of a dollar basis as was formerly the case. All other materials continue on a dollar basis.
- Utilities—Amount of critical metals-chiefly steel and copper—that may be used for maintenance and repair of transmission and distribution systems is cut approximately 40% by WPB. Electric utilities must buy at least 75% of their wire, cable, and busbar from inventories of other utilities instead of from manufacturers. Gas and water utilities must buy at least 40% of pipe and supplies from other utilities. (Amendment to P-46.)
- Chemicals—OPA has informed the chemical industry that, except in cases of unusual hardship, increases in container costs will not be recognized as grounds for upward adjustment of ceiling prices. The expressed purpose of this regulation is to encourage the substitution of cheaper containers to replace steel and other critical materials which are no longer available for packaging of many chemicals under WPB Order L-197.

Although it may be necessary for some companies to switch from steel to more costly containers such as glass carboys or tight barrels, the burden of proof that cheaper containers are impractical rests with the company. Even if increased costs are unavoidable, price relief will not be considered unless the increase is large enough to infringe seriously upon profit margins. In all other cases sellers must absorb the increases as their contribution to the anti-inflation fight.

• Typewriters—Only models that work practically as well as new may be classi-

feed for sale as rebuilt under new standards issued by OPA for pricing used models; all others must be sold as reconditioned at the lower prices prevailing for this category. Higher ceiling prices and rental rates also are established for used Electromatic typewriters. (Amendment No. 1 to Regulation No. 162.)

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- Manganese Steel—Price ceilings on manganese steel castings and products were lowered substantially, in effect, when OPA rolled back the ceiling date from March, 1942, to the first half of October, 1941. The expanded rate of operations in the industry has more than made up for increases in production costs over the past year, according to OPA, and the new ceilings will still permit fair and reasonable profits. (Maximum Price Regulation 235.)
- Hand Tools—Sales and deliveries by manufacturers are now limited to purchase orders rated A-9 or higher, instead of A-10 or higher as specified in the original order. Types of alloy steel which may be used in manufacture have been reduced from eight series to five, purpose being to conserve critical alloying elements, particularly manganese. (Amendment 2 to General Preference Order E-6.)
- Solid Fuels—Wholesalers and retailers who have sustained increased costs for specific items, may, within certain limitations, pass the increase on to their customers, in order to insure continued flow of supplies which might otherwise be cut off. Adjustments are allowed only on individual sizes and kinds of fuels on which costs have increased, not on solid fuels generally. Increased costs have occurred in cases where suppliers who had been selling to certain dealers at prices lower than the ceilings have recently raised such prices to the ceilings. Amendment 8 to Maximum Price Regulation 122.)

Certain coal mines in Iowa have been granted a price increase averaging about 35¢ a ton. The mines were unable to meet production costs at present maximum prices, and had been forced to close down. (Order 63 under Maximum Price Regulation 120.)

- Golf Clubs—Better not take it out on your clubs any more when you slice into the rough. Iron, steel, and other critical materials can no longer be used for the manufacture of repair and replacement parts for broken, bent, and otherwise disabled golf clubs, so that such parts will no longer be available once current stocks are gone. (General Limitation Order L-93, as amended.)
- Textiles—Premiums that manufacturers are permitted to charge for widewoven cotton goods (over 42 in.) are reduced by OPA on the contention that a



Auto Ordnance Corp.,
Bridgeport, Conn.
Auto Specialties Manufacturing Co.,
St. Joseph, Mich.
Barbour Stockwell Co.,
Cambridge, Mass.
Beech Aircraft Corp.,
Wichita, Kan.
Bendix Aviation Corp.
(Two divisions)
Boonton Molding Co.,
Boonton, N. J.
Bucyrus Erie Co.,
South Milwaukee, Wis.
James Cunningham Son & Co.,
Rochester, N. Y.
E. I. du Pont de Nemours &

(Two plants)

General Motors Corp., Indianapolis, Ind.
B. F. Goodrich Co., Akron, O.
Gundlach Manufacturing Co., Fairport, N. Y.
P. H. Hanes Knitting Co., Winston-Salem, N. C.
Hobart Manufacturing Co., Troy, O.
Hood Rubber Co., Watertown, Mass.
A. R. Hyde & Sons Co., Cambridge, Mass.
The Indium Corp. of America, Utica, N. Y.
Industrial Tool & Die Works, Inc.,
St. Paul, Minn.
Johnson & Johnson (Two plants)

Johnston Steel & Wire Co., Worcester, Mass.
Leece-Neville Co. (Two plants)
Lights, Inc., Alhambra, Calif.
Lipe-Rollway Corp.,
Syracuse, N. Y.
Mack Manufacturing Co.,
New Brunswick, N. J.
Monitor Piezo Products Co.,
South Pasadena, Calif.
Parish Pressed Steel Co.,
Reading, Pa.
Philco Corp.,
Chicago, Ill.
Rieke Metal Products Corp.,
Auburn, Ind.
Texas Gulf Sulphur Co.
(Two plants)

(Earlier winners of the Army-Navy award for excellence in production will be found in previous issues of Business Week.)

cost study shows conversion costs on wide goods are less than on narrow. Goods affected include sheetings (other than bed linen), drills and four-leaf twills, sateens, print cloths (other than wide window-shade cloth), and gray soft-filled sheetings. (Amendment No. 12 to Regulation 118.)

WPB's Amendment 1 to Schedule I, Order M-207, alters classification of denim; restricts construction of denim stripes; removes from inventory restrictions moleskin and corduroy work pants, and cotton suede, corduroy, and moleskin fabrics; removes from inventory restriction work gloves for seasonal use and fabrics from which they are made.

- Trucks and Buses—Rules governing applications for certificates of war necessity for fleets of trucks and buses have been issued by ODT. Coincident with announcement that applications have been mailed to virtually all fleet operators, ODT notes that blanks may be obtained by writing Box 2259, Detroit.
- Asbestos, Abrasive Specials—Instructions for determining manufacturers' maximum prices of asbestos fiber specials (Order 94) and bonded abrasive specials (Order 96) have been issued by OPA. In both cases, ceiling prices will be determined by use of the same formula used in March, 1942.

- Hosiery—WPB has amended Order M-182 so that it freezes stocks of used nylon hosiery in the hands of dealers as well as stocks of used silk hosiery. A public drive soon will be launched for collection of such hosiery for re-use in making powder bags.
- Vinyl Polymers—All products in this class have now been brought under allocation control. The special order relating only to polyvinyl butyral has been revoked, since this product is covered under the new order. (Order M-10, as amended; revocation of Supplementary Order M-154-a.)
- Apparel—Amendment No. 2 to Regulation No. 172 prescribes methods to be used by contractors in the apparel industry in determining their maximum charges for purchasers of different classes.
- Commissions—Auctioneers, commission sellers, and commodity brokers are now authorized to fix as their ceiling commissions the percentage rate regularly used during March, 1942. Under the old regulation they were permitted to charge only the actual dollars-and-cents commission which they regularly used during March, so that in cases where the price of a specific commodity had increased, their percentage commis-



Today in more than 100,000 war plants, there is no night. Production goes on 24 hours a day, every day . . . and more than half the time, workers depend solely on artificial lighting. Ask yourself now if the lighting in your plant is adequate for your vital part in Victory . . .

Those words aren't ours. They're from the National Better Light-Better Sight Bureau. So are these . . .

"Not more than one thousand of these 100,000 plants, it is estimated, have adequate lighting by modern standards, for the most efficient production. In the other 99,000 production is below maximum because lighting is not good enough, and in fully half of that 99,000 lighting is bad enough to constitute a really serious bar to efficiency. Their illumination simply is not fit for war work."

How do your men and women vote the calibre of your lighting?

Pioneers in Good Lighting since 1844

MILLER 50 FOOT CANDLER and 100 FOOT CANDLER will provide your plant with fine, man-made daylight . . . adequate, productive illumination evenly distributed over every working surface. MILLER TROFFERS will duplicate that lighting performance in your plant offices and drafting room.

Nor does MILLER stop here. Working with all light sources as we do . . . incandescent, mercury vapor and fluorescent ... the MILLER lighting engineer is in an unbiased position to recommend the one kind and amount of lighting needed for your particular kind of business. A vital MILLER function in this fight is providing light . . . the right light for you, the right light to hasten Victory. Write for detailed information. (Representatives in principal cities.)

BUY U.S. WAR BONDS





SIGN OF THE TIMES

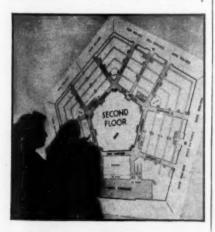
New Jersey warns motorists of war and acute rubber shortage.

sions were proportionately reduced. It is this situation which the amendment seeks to correct. (Amendment 2 to Regulation 165.)

- Tin Oxide-OPA has fixed prices at which the Metals Reserve Co. may buy up idle or frozen stocks of tin oxide and tin anodes. (Order No. 4 under Maximum Price Regulation 204.)
- Phosphate-Maximum prices approximately 20¢ per ton under current levels for the lower grades of Florida and Tennessee phosphate rock, and approximately the same levels as those prevailing for higher grades, are established by OPA to eliminate uneven price structures and insure greater production of the higher grades. (Regulation 240.)
- Cotton Ginners—Without modifying cotton ginning prices, OPA provides an optional pricing method by which ginners may charge the farmer for bagging and ties needed to cover a bale of cotton. The ginner may charge either (1) the actual cost of the materials to the ginner, or (2) \$1.75 for each set of bagging and ties, whichever is lower. (Amendment 3 to Regulation 211.)
- Cotton Warehouses-Ceiling prices which warehouses may charge for storing and handling government loan cotton received for storage on or after Aug. 25, 1942, have been established by OPA at the 1942-43 Commodity Credit Corp. rates. In the case of public cotton, the warehouseman may choose as his ceiling the Commodity Credit rates or

his highest prices for March, 1942. (Amendment 40 to Supplementary Regulation 14.)

- Loading of Cars—ODT's Order No. 18, as revised, goes into effect Nov. 1. On loadings that do not conform, shipper must endorse on the shipping instructions a certificate specifying the exceptions.
- Karakul-Sales and deliveries of Persian lamb or karakul, once under price control and then exempted by Amendment No. 5 to Supplementary Regulation No. 1, are again made subject to GMPR.
- Cordwood—State OPA offices are authorized to make price adjustments whenever they determine that established maximums are inadequate to insure a sufficient supply of firewood to meet heating requirements. (Amendment 41 to Supplementary Regulation 14.)
- Shipping Taking complete control of the 735 commercial vessels with a gross tonnage of 3,500,000 tons that now ply the Great Lakes, ODT will exercise authority to determine not only what routes the boats shall sail but under charter or lease to what person. Previously, to expedite the movement of iron ore, ODT had exercised qualified control over vessels of more than 1,000 tons, and it completely regulated the schedules of 32 tankers. (ODT 25.)
- Machinery—Because many rental contracts for machines and parts—notably construction equipment used on government work contained "recapture clauses" that provided for transter of title to the lessee when monthly



DIRECTION FINDER

The War Department's new Pentagon building has 25 miles of corridors and covers 43 acres, so floor diagrams are required to keep new employees on their beams.

Business Week • October 24, 1942



TENUAL

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MOLD

CASTINGS

ALUMINUM CASTINGS ARE GOING "Over There" IN PLANES...-TANKS...-SHIPS!

And we know our castings will give a very good account of themselves wherever they go, because each and every one of them meet all the specifications of the Army...—Navy...—Air Corps. • Our ability to meet these rigid specifications with speed and quantity production is your guarantee of receiving quality sand and permanent mold aluminum castings when the victory is won.



SPEEDING THE TOOLS OF WAR



Production is only half the job in this man's war! It's delivery—speedy, safe delivery that will bring "V" day!

Protek-Sorb Silica Gel is playing an important part in delivery schedules of many of the items of modern warfare. By eliminating the cause of corrosion, rust, mildew and other moisture damage during storage or shipment, parts and complete assemblies are delivered clean—ready for use or action. Time is saved at shipping point and receiving point. Conservation is served, Production is aided, final Delivery is speeded.

THE DAVISON CHEMICAL CORPORATION, Industrial Sales Dept., BALTIMORE, MD.

Dotak-Sorb



At left: A dual installation of 125 Amp., "JUNIOR" Type B Busdact in this plating room supplies low voltage direct current to electrodes, and alternating current to motors driving the tumblers. B SHUTLBRAK (Operating Type) Plug-in Devices are used for controls.

BUSDUCT helps save rubber

In remodeling or expanding the electrical distribution systems of large, small and medium sized plants, ® Busduct, which contains no rubber, fits perfectly into the picture... It saves production hours; machines may be moved to any desired position, plugged in quickly, and operation started with minimum loss of time ... Installation cost is low—salvage value high ... Designed for 2, 3 and 4 wire feeder systems; 250 volt DC, 575 volt AC, maximum. Plugin type capacities, 125 to 1,000 Amps. Feeder type, 250 Amps. and up ... Write for illustrated Bulletin 65, which shows the application of this flexible, economical and efficient system to your distribution problems.



payments above carrying charges equaled the sales value of the machine, and because these clauses have given rise to "many problems of interpretation and administration," OPA has decided to solve these complications by exempting all such contracts, entered into prior to July 22, 1942, from its price ceilings. The rentals charged, however, are still subject to price control. (Maximum Price Regulation 136, Amendment 27.)

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Although retail sales of machinery are specifically exempt from price control, OPA now makes it clear that the exemption does not apply to wholesale sales, even though made by retailers. In identifying what is meant by a retail sale, OPA specifies that delivery must not be made to an industrial, commercial, or governmental user but to a bona fide ultimate consumer; that the sale must be made in a store that deals predominantly with such ultimate consumers; that the purchaser must be one to whom such sales were ordinarily made prior to Oct. 1, 1941, at prices ordinarily charged. (Maximum Price Regulation 136, Amendment 25.)

· Cordage-Agave fiber cordage has been reserved exclusively for specified governmental, lend-lease, and essential civilian uses. The latter classification includes wire rope centers, hawsers of one inch or more in diameter for shipping operators, rope for commercial fishing, power transmission, rigging used in construction, and catlines, bull-ropes, and drilling cables used in well-drilling and quarrying. WPB is pushing a program for the development of jute, lisle, and cotton substitutes. Any cordage processor who has on his books a rated order for procurement of cordage can, if the purchaser agrees, extend the rating to producers of jute or cotton yarns if agave or Manila are not available or allowed. (M-84, Amendment 4.)

• Steel-To enable steel warehouses to fill their function (BW-Oct.3'42,p36) of supplying small quantities of various products to customers, WPB's Iron and Steel Branch on Nov. 1 will institute a new system for supplying limited tonnages on priority-rated orders. Heretofore the warehouses generally have not had sufficiently high priorities to keep stocked. Under the new plan, the overall monthly tonnages needed for dis-tribution by warehouses will be determined by the Iron and Steel Branch and the business spread among producing mills. Producers will deliver this monthly "warehouse load" on properly rated purchase orders even though the ratings might not otherwise be high enough to get the steel.

• Automotive Parts—The amendment to P-107 giving an A-3 rating to replacement parts has been revoked inasmuch as it has been outmoded by PRP.

PRODUCTION

Versatile Toters

WPB hunt for industrial power trucks puts spotlight on their key role in present-day production and storage setups.

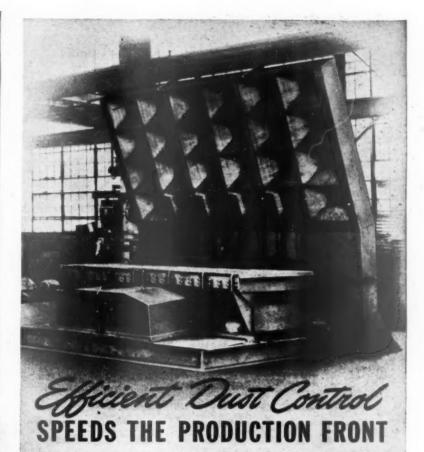
WPB's recent appeal to owners of idle, or partially idle, industrial power trucks, calling upon them to list the versatile material handlers in Washington "so that vitally needed used trucks can be diverted quickly to war production," spotlights their importance in practically any kind of production or storage setup.

storage setup.

• Where to Write—If you have such a truck in or around your plant and can possibly spare it, send a description to Ernest Tupper, Chief, Inventory and Requisitioning Branch, War Production Board, Washington. If you have more than one to spare, so much the better. War production can use practically any make or model in good running condition, whether powered by storage battery



At Consolidated Aircraft's San Diego plant operation of the entire fleet of fourteen lift trucks in the parts department has been turned over to women.



• Typical of Bartlett-Snow contributions to better working conditions and less hazardous foundry operation is this side wall dust hood (U.S. Patent 121704). It delivers 33,000 cubic feet of air per minute at low veiocity to a plenum chamber connected with an underground duct to a Bartlett-Snow dust collector located outside the building... succeeded in overcoming a dust nuisance created by shaking out crane delivered dry sand molds after all other artempts had failed.

Long experience and a technical, mathematical method of approaching the solution, has enabled Bartlett-Snow engineers to make substantial contributions to dust and fume control in ferrous and nonferrous foundries and certain non-metallic operations. These result not only in the control or entire elimination of the nuisance but also in substantially increased production of materials vitally needed to beat the Axis. The C. O. Bartlett & Snow Co., 6000 Harvard Avenue, Cleveland, O.



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* * *

or gasoline, whether equipped with lift platform, stationary platform, fork, or crane. Tractors for hauling one or more nonpower trucks in trains are likewise in demand.

Why a shortage in industrial power trucks has arisen is not hard to trace; there probably aren't more than 30,000 of them all told in the country.

• Often Custom-Made—Unlike highway motor trucks, which have been mass-produced into the millions (4,876,054 of them were registered in 1941), a good many industrial trucks have been custom-made jobs, built to satisfy the needs, and whims, of manufacturers who felt, not always unjustifiably, that their businesses were different.

Fortunately, however, for WPB and the war effort, all ten industrial truck manufacturers—Automatic, Baker-Raulang, Crescent, Easton, Elwell-Parker, Lewis-Shepard, Mercury, Towmotor, Vaughan (Mobilift), Yale and Towne—have been working toward all the standardization that their customers would permit for several years.

• Five Broad Systems—Though the lifting capacities of their various models may range from a few pounds to 30 tons, and the heights to which they will hoist their loads may vary from a couple of inches necessary to clear a loaded skid from a floor to 40 feet for warehouse tiering, more than 90% of them are designed as the primary units of five broad

material-handling systems: tractor-traile platform-truck, lowlift-truck-skid, high lift-truck-skid, fork-truck-pallet.

The rest of them are more or less special jobs like ram trucks for carrying immense rolls and coils of steel; rotating forks for lifting drums of chemicals and large rolls of newsprint endwise and turning them in transit to a horizontal position for storage; scoop trucks for fuel handling and waste disposal; crane trucks for lifting and carrying large objects without enough floor clearance in permit the use of a fork truck; wind trucks for easing still larger objects up an inclined plane and onto the carrying platform.

• Tractor-Trailer Offshoot—Whatever the handling system or type of power truck, it is pretty clear that every one of them stemmed from the tractor-trailer system, which in turn stemmed from trains of hand trucks hitched together and hauled through factory aisles and yards by human muscle. Strictly speaking, the tractor-trailer is a haulage system, since the sole function of the power tractor is to supply motive power, and that of the trailers to carry material.

But though it does not normally contain within itself a means of loading and unloading material, it provides such an economical means of handling large quantities over the long distances found in many war and civilian plants that its continuing use is insured.

• In Metal Salvage—Just recently. Wright Aeronautical installed a brand new metal-salvage system which use trains of self-dumping trailers to carry chips and turnings away from machine tools for reclamation (BW—Sep.26'42, p62).

The platform-truck system, likewise pure haulage, lends itself to operations where there are external means of loading and unloading, as in factories well equipped with cranes and hoists, at steamship piers, and in railway stations. The lowlift-truck-skid system, which got its first workout in the last war and represents the first true power-truck handling system, sprang from a recognition of the possibilities for eliminating commodity rehandling through the use of skid platforms.

• From Job to Job—Instead of piling finished parts on the floor for a truckman to pick up and repile on a truck for hauling and unloading at the succeeding operation, the modern mechanic either lays the parts on a conveyor running to the next operation or piles them neatly on a skid platform. When the skid is loaded to capacity, along comes a trucker with a lowlift truck, raises the load an inch or two from the floor to give running clearance, and whisks the whole to the next operation.

Meanwhile, the mechanic transfers the empty skid, from which he took the parts for his operation, from the unloading to the loading position and pro-



1. HANDLING HEAVY LOADS

With Baker Trucks on the job there are no lame muscles, strained backs or ruptures from over-exertion due to heavy lifting.

2. ELIMINATING MANUAL HANDLING

The danger of crushed fingers or toes, or other personal injury, is minimized when Baker Trucks do the handling.

3. ELIMINATING HAZARDS OF HAND TRUCKING

Baker Trucks do not replace hand trucks. But they can eliminate the danger of hand truckers exceeding safe load limits.

4. ELIMINATING OVERHEAD DANGERS

Many handling operations performed by overhead equipment can be more safely and economically performed by Baker Trucks.

5. SAFER TIERING

Precise control of Baker Hy-Lift Trucks means safe tiering in plant or warehouse.

THE BAKER MATERIAL HANDLING ENGINEER CAN HELP YOU

He can show you how your plant safety can be improved with proper handling facilities. He is at your service.

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 $\pm \frac{1}{10,000}$...AT WHAT.
TEMPERATURE?

Precision parts which pass inspection today may be misfits on the assembly benches tomorrow. Why? Because ordinary temperature changes cause expansion or contraction which may even exceed tolerances.

To speed precision finishing and assembly, air conditioners maintain uniform temperature in many vital plants today. "Artificial weather" aids production in other profitable ways, too. It solves rust and corrosion problems; ends dust troubles; makes workers more comfortable and productive; pays its way by increasing man and machine output and by decreasing spoilage and rejects.

But—it takes the right air conditioning system to give maximum benefits economically... a system that's tailor-made to meet your particular needs. That usually means decentralized units rather than a central system. Decentralization gives flexibility. It permits meeting ideally the often divergent needs of various departments, and allows weathermaking to be suspended, for economy, when a department is closed. It localizes the shutdown should a unit be damaged. It permits quick, easy installation, usually without ducts.

Because no two problems are alike, it's wise to consult a locally experienced expert when you're considering air conditioning. You'll find the resident Fairbanks-Morse engineer an ideal collaborator. The completeness of the F-M line frees his judgment from bias. To meet him, simply write Fairbanks, Morse & Co., Dept. J131, 600 S. Michigan Avenue, Chicago. Branches and service stations throughout the United States and Canada.



FAIRBANKS-MORSE Air Conditioners

ceeds with his work. Power-truck manufacturers are the first to admit that the lowlift-truck-skid system takes a little more time and labor than a straight-line conveyor system. They point out, however, that war production lends itself to less standardization than former civilian production, calls for frequent changes of tooling, which might upset a conveyor system, but which have little effect on a power-truck installation.

• Highlift Skid System—The success of skid handling suggested the desirability of extending it to the tiering of loaded skids one above another, as in storage or in a freight car for shipment, and the basic idea of the highlift-truck-skid system was born. Here the truck is able not only to lift a loaded skid a few inches from the floor for running clearance but also to lift the load several feet from the ground for stacking.

Next, the success of highlift-truck-skid suggested the desirability of replacing the platform, which lifts the skids, with long steel forks having two or more tines strong enough to handle heavy loads yet thin enough to slip between the top and bottom of a pallet. Since a fork requires less clearance than the elevating platform of a lift truck, pallets of wood or metal may be made correspondingly shallower than skid platforms.

• Gravity as an Ally—This, together with wider load distribution when double-faced pallets are employed, gives obvious advantages in tiering. But it was not until the truck manufacturers developed highlift fork trucks, which would tilt slightly backward to let gravity hold a load securely in place and then slightly forward to let gravity assist in sliding the load off the fork, that the fork-truck-pallet system became an unqualified success.

Now, users are finding that tilting fork trucks can be used for transporting certain loads with or without pallets. It's no trick at all to ease a fork truck under a drum or a box, or a neatly arranged pile of boxes, and roll serenely on its way. In plants using pallets and skid platforms and hand trucks and tote boxes, a fork truck will frequently be pressed into service to handle them.

• Shipping Practices—Since wood pallets are inexpensive and can be homemade, many of them are being used for shipping, reused by the consignee, or thrown away. Since fork trucks can be made small and nimble enough to run in and out of box cars, Pratt & Whitney uses them to stow its radial aircraft engines for shipment in two tiers.

Strangely enough, no simple type of handling system is likely to supersede any other type entirely. Each has its place somewhere in industry, and it's the main job of a material-handling manager to find which will best fit into a particular scheme or sequence of production. Nor will he specialize on trucks to the exclusion of cranes and hoists and



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ENAMEL FOR MUFFLERS

With stainless steel on the critical list, Taylorcraft Aviation turns to less critical steel for the engine exhaust stacks and mufflers of its light planes, proofs it against rust and corrosion with porcelain enamel inside and out. Here an enameler dips a stack and muffler assembly in the materials.

conveyors and interbuilding railway service. But he will integrate them, replacing any one of them with different equipment when superior efficiency and lower costs can be obtained.

• Batteries or Gasoline—When it comes to the selection of particular models of trucks, the material-handling manager can choose either storage batteries or gasoline for power. If his choice falls on batteries which, incidentally, outnumber gasoline installations nine to one, he has still another choice between the alkaline and the acid types.

The alkaline type, which is manufactured only by Thomas A. Edison, Inc., has a somewhat higher first cost, but a longer life than the acid type, manufactured by Electric Storage Battery (Exide), Gould, KW, Philco, and others. Both types are excellent, both capable of furnishing 16 hours of material handling on an eight-hour charge.

Gas Trucks—If his choice falls on gasoline, he is more limited. Townstor and Vaughan make gas trucks exclusively. Elwell-Parker and Lewis-Shepard make gas or electric. Mercury makes electric trucks and gas or electric tractors.

Automatic, Baker-Raulang, Crescent, Easton, Yale & Towne make electric trucks exclusively. However, if he is buying one of the latter six makes and thinks he must have gasoline power, he can specify a gas-electric conversion unit, built by the Ready-Power Co., to slip into the space normally occupied by batteries.

More Alkylate

Development of process for use of HF gives promise of making blending agents more abundant for airplane fuel.

Airplane fuel is a far cry from the comparatively simple gasoline used by cars and trucks and tractors. To a "base stock" of about 75-octane rating which can be the product of orthodox ende oil distillation, but is increasingly the product either of catalytic cracking or hydrogenation) is added approximately an equal amount of a "blending stock" of 88- to 100-octane rating. To the mixture is added less than a quarter ounce per gallon of tetraethyl lead, which boosts the octane, or anti-knock, rating of the whole to a theoretically perfect 100-octane number or beyond. • The Blending Stock-Most of such blending stock is "alkylate," a chemical combination of certain traditionally inert paraffin hydrocarbons, like butane, with the more active olefin hydrocarbons, like butylene-both of them petroleum products. As the U.S. aircraft program has expanded, need for airplane fuels, and the constituent stocks for them, has similarly increased. With the demand for alkylate comes a demand for greater alkylation capacity.

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Original development of alkylation came from the discovery in the research laboratories of Universal Oil Products Co. that paraffins could be alkylated with olefins by using aluminum chloride and hydrochloric acid as a catalyst.

• A Drawback—This process has the drawback of using up relatively large quantities of critical materials and thus making a high cost for catalyst per barrel of resultant fuel. As yet there is no commercial production by this method, though its application to producing certain high-octane aviation material is probably just around the corner. Practically all alkylate to date has been made with a sulphuric acid process that likewise uses up lots of that catalyst and boosts costs.

Discovered in peacetime, when aviation gasoline was in no great demand, and thus tested out only on the laboratory scale, was Universal's process for using hydrofluoric acid (HF to a chemist) as a catalyst for alkylating propylenes, butylenes, and pentylenes.

• A Voracious Eater—Reason why this was not commercially used was that HF had a hopelessly bad reputation. The material is easily made from fluorspar and sulphuric acid. But it is so reactive that it eats glass, and makes nasty burns on anyone who handles it carelessly. It emerged from the industrial doghouse only recently, when researchers discovered HF can be shipped in mild steel



THAT MAN'S HERE AGAIN!

"It's the inspector from the Wages and Hours Division and our payroll records are behind again. Maybe he'll just go away."

But you can't stall the inspectors. They can demand *completed* records in 72 hours; usually want them right away.

Better switch to the Todd Form-Master System that gives you, the inspector, and other State and Federal agencies the required data at once.

How? Form-Master enables any clerk to handpost check stub, payroll sheet and individual earnings record all in one speedy operation. Then the work is complete; records are adequate and accurate. No extra posting to cause delays, errors in copying, overtime or fines. The Form-Master time-and-money-saving features are yours, without costly outlay for equipment.

Instead of dreading inspectors' visits and calls for other reports, Form-Master users can sit back with a welcoming smile. Want more details? Mail the coupon.

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tank cars or cylinders without corrosion if kept dry, and that its tendency to burn human flesh can be counteracted by a few simple precautions.

The development of the use of HF in alkylating paraffins with olefins is a discovery of the first magnitude right now. HF is a superior catalyst for the purpose, producing higher yields. It is long of life, can be reused many times. The materials of which it is made are plentiful, cheap, and not too strategic.

• New Plants Going Up—Coming into production very soon is a new HF-process plant being built for a major oil company. The plant is under license from and designed by Universal Oil Products Co. Many others are well along in construction, also engineered by U.O.P. Plant locations and capacities are super-sshh, but these units will so tremendously increase the country's output of alkylate that within the next several months a sizeable proportion of all aviation gasoline will be coming from alkylate catalyzed with HF.

The promise of this process for the

The promise of this process for the future holds military and commercial significance far exceeding its immediate usefulness. Its importance ties squarely into the trend toward ever higher-octane aviation gas to power ever better airplane engines. With alkylate so plentiful from the HF catalytic process, airplane fuel exceeding 100-octane can soon be had without raising a sweat.

Platens Revivified

Grinding process developed by Studebaker reduces need for replacement of typewriter and printing rollers.

A grinding process developed at Studebaker to recondition typewriter platens and printing machine rollers greatly reduces the need for replacements.

Rubber typewriter platen rolls used in offices ordinarily require renewal due to pitting and distortion after some 18 months of use; costs usually range from \$3 to \$4.50. A roller for a hand press requires reconditioning or replacement after a year or so of 16-hour days. A new one costs about \$12 when you can get it.

• Double Life or More—The new grinding method, demonstrated at the American Management Assn. meeting in Chicago this week, gives platen and roller two to four times as long a life at a cost of but a few minutes of machine time

Studebaker's process was built around a discarded buffer motor from its body plant, a used grinding wheel, a secondhand vacuum sweeper, and a bench lathe used in its office management di-



Components of Studebaker's machine for reviving typewriter platens: a discarded motor, a used grinding wheel, vacuum sweeper and a bench lathe.

vision's repair department. Platens or rollers are mounted in the lathe and turned at about 175 r.p.m. The grinding wheel, on the buffer shaft, is brought into contact and turned in the same direction at 1,200 r.p.m.

• To Smooth Roundness — Approxi-

• To Smooth Roundness — Approximately 0.002 inch is removed from a typewriter platen, bringing it to smooth roundness again. The vacuum sucks up the rubber filings as they are ground off, so they can be turned over to salvage.

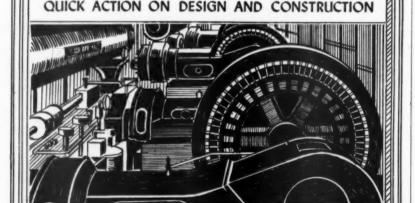
The Studebaker repair experts have rigged up a trip-bar which stops the process when the buffing wheel travels the length of the platen. This makes it unnecessary for an operator to supervise the work after it has started.

Studebaker is offering the idea without charge to government agencies and to companies plagued with roll-replacement problems in this period of rubber scarcity.

NEW DETINNING PLANT

A new process for recovering tin and steel from tin cans (BW-Aug.8'42, p38), originated by two former students of the University of Denver, will be used in a recovery plant now being built by the Compressed Steel Corp., Denver, to handle from 1,000 to 2,000 tons of cans monthly. President Philip Paden announces that production is scheduled to begin before the end of the month.

William G. Norlander, 27, of La-Feria, Texas, and Robert L. Alldredge,



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FOR Excellence IN WAR PRODUCTION

We deeply appreciate the honor of having received the Army-Navy "E" awarded for highest achievement in war production . . . justifiably proud that we are among the first in the zinc industry to be so honored.

The Army-Navy "E" pennant over our Monsanto plant will serve as inspiration to our entire organization to exert ever-increasing effort to win the battle of production.

AMERICAN ZINC COMPANY OF ILLINOIS
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This Long-Lived Lumber Helps The Railroads' War Effort

ICING STATIONS, food-saving stations for the railroads, need some "saving" themselves; they're continually exposed to conditions making them likely targets for decay. So, it's fortunate that a means was found of giving long life to icehouse linings, loading-platform substructures, and decking. The railroads can forget that worry and devote their time to moving vital war materials.

WOLMANIZED LUMBER*, adopted by many railroads for these uses, provides that protection. It is able to resist decay and termite attack because it is deeply impregnated with a proven preservative. The treated lumber is clean, odorless, paintable.

wartime structures everywhere are being built with Wolmanized Lumber. The use of wood speeds construction by simplifying handling and erection. The use of this long-lived lumber assures long life. The performance of millions of feet of Wolmanized Lumber, some of it in service for over fifteen years, promises low upkeep costs in the years to come.

WOLMANIZED LUMBER has gone to war today. But think of it for the peacetime structures you are planning. It offers you an inexpensive means of defeating decay and termite attack. We'll gladly send you information on its use. Write American Lumber & Treating Company, 1656 McCormick Bldg., Chicago, Ill.

*Registered trade mark



20, of Phoenix, Arizona, chemical engineering students of the University, started studying tin can recovery after Norlander picked it as his thesis topic. They settled on a caustic soda process, found it too slow—the soda taking several days to de-tin a can—and discovered a way to speed it up so it works within a few hours. This acceleration process has been held as a war secret.

Mr. Paden built a pilot plant, ran it long enough to prove the process practicable, and then began building the larger plant.

mager Prants

Shift to Plywood

Lifeboats tested for seaworthiness can outperform steel boats and wins Maritime Commission order for 1,000.

Production of plywood lifeboats for Liberty freighters is being undertaken in the plant of Gunderson Brothers, Portland, Ore. Under a contract with the Maritime Commission for 1,000 boats, about eight will be completed per day.

• Boats "Inflated"—Because of the tightening steel situation, naval architects experimented with wood, long excluded from the lifeboat field because planks dried in the sun and opened at the seams. Plywood had been tried, but the stiff plywood planks made the boats square-cornered and unseaworthy.

To obtain the curves required, architects built up boat sections with 6-in. wide veneer strips, laid diagonally in crisscross fashion in molds. Rubber balloons were then inflated to force the plies into shape while a waterproof phenolic resin bond between them "set."

• Tested by Coast Guard—A sample boat was turned over to the Coast Guard for a series of tests. On test after test, the plywood boat outperformed the standard steel lifeboat now being used on Liberty Ships, according to sponsors.

Loaded to capacity, the gunwales of the plywood boat were 21 inches above the water. Fourteen inches is normal with steel. The plywood craft is almost a half-ton lighter than its steel equivalent—1,470 pounds vs. 2,400 pounds. And since only 225 pounds of steel is used in the plywood boat (for braces), approximately a ton of steel is saved on each.

• Postwar Possibilities—The Maritime Commission ordered 1,000 lifeboats, four to each Liberty ship, enough to supply all the freighters being built on the Pacific Coast. Quickly pressed out in molds at low cost, plywood boats may find an impressive market in the "flivver cruiser" field after the war.

CELLOPHANE BUBBLES



Lighter than cork or kapok, which it promises to replace in life preserver and crash pad, "Bubblfil" is dense enough to support a young lady who



. . . Reveals how it is made of strands of air bubbles trapped in cellophane by du Pont chemists, and how she can carry a whole bale of it with very obvious ease.



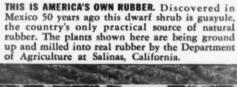
grows its own Tires



ONE FOURTH OF THIS PLANT IS RUBBER. When guayule was discovered growing wild it contained 10% rubber. After cross breeding, seed selection and other improvements the American guayule contains 23% rubber. This is a larger percentage of rubber by dry weight than exists in any other known plant, including the Hevea tree from which our pre-war supply was drawmy



Business Week • October 24, 1942





NARVEST GOING ON. (Above) This special harvester is gathering the plants in the field pictured above, and chops them up in preparation for milling into real rubber. The rubber is contained in all parts of the shrub except the foliage.

RUBBER READY FOR USE. (Left) This is real rubber, ready to be made into tires or balloons or life boats. The guayule shrub has been crushed, separated by flotation from the extraneous substances, dried and pressed into bales such as the one shown here.

Standardization

Wright Aeronautical Corp. success with new lathe tools leads to work on cutting bits for other machine tools.

Several months ago Wright Aeronautical Corp. began intensive research and production tests on a standardized cutting tool for lathes. In peacetime, many a veteran machinist in the farflung aircraft engine plants might have looked down his nose, at the idea of anyone but himself grinding tools to his satisfaction. In wartime, every last machinist has cooperated in the twin hopes of expediting all-out production and conserving high speed tool steels with their scarce components of tungsten, cobalt, and molybdenum.

• New Cutting Bits—Now that the standardized lathe tool has won the hearts of the machinists (Myron B. Gordon, vice-president and general manager, says that it will machine 10 to 30 times the number of alloy steel pieces produced by former tools before regrinding), they are cooperating even more enthusiastically in the development of new standardized cutting bits for other machine tools like shapers and planers and boring mills.

Stripped of all the technicalities possible, what Wright has achieved is a series of general purpose lathe tools especially designed for rough turning operations on alloy steel with all the feed and speed possible.

and speed possible.

• How It's Done—Specifications call for a 16-in. nose radius, 13-deg. side rake, 5-deg. back rake, 6-deg. front and side clearance angles, and a precision chipbreaking groove which snaps turnings into little pieces, keeps them from winding around the work and heating the tool's cutting edge, makes them easier to dispose of.

The groove, which extends back from the nose, has a radius of $\frac{1}{16}$ in., a depth of $\frac{1}{16}$ in., and a width at the nose varying from $\frac{3}{32}$ in. for a $\frac{3}{8}$ -in. tool to $\frac{3}{32}$ in. for a tool 1 in. square. More precise specifications on the design and grinding procedure will be furnished gladly by Wright from its Paterson (N. J.) headquarters.

• Other Factors—Just as important as the standardized angles and radiuses of the new tool are the keenness of the cutting edge and the ultrasmoothness of the interior curve of the chip breaker and any other surface that might come in contact with chips and work. Unlike the cutting edge of an everyday handground tool, when seen under a highpower microscope, the edge of this one is smooth in profile, has none of the sawtooth ridges usually found.

Thus the chips tend to slide off the



FIRST SOLID FUEL TRUCK

Probably the first truck in the United States to achieve regular, commercial operation on solid fuel is a 1½-ton job equipped with a home-made, charcoalgas producer by Champion Paper and Fibre Co. at its Canton (N. C.) mill. So economical has it been (it gets 75 miles from a 120-lb. filling of charcoal) that a similar truck has been charcoal-equipped, and R. B. Robertson, Champion vice president, is working on a passenger car, just in case. Like many of the nearly 500,000 gasoline-less trucks, buses, and cars, which run on charcoal, lignite, coal, wood, whatever in gasoline-pinched Europe, Champion's trucks have gas producers on their right sides. Here charcoal is burned with insufficient air for full ignition, producing a gas which flows forward through piping to cylindrical coolers and filters on the front bumper, and from thence backward through more piping to a modi-



fied carburetor. Mr. Robertson is also experimenting with rubberless wooden tires, is finding that hard roads wear them out too quickly, is compromising on a wooden guard (above) which protects a rubber tire from the wear and tear of rutty earth roads. He thinks the tire problem "is a tough one to solve."

tool cleanly with a minimum of the frictional heat normally produced by contact with rough edges and surfaces, hence minimum wear and tear, maximum life between grindings.

• Temptation Removed—Since the machinist does not now have to grind his own tools, but has fresh ones ready for instant use, he has less temptation to run them ragged. He changes them before they are dulled and "cratered" to a condition where a great deal of scarce high speed steel would have to be ground off to re-establish correct angles and clearances.

Back of the keenness and smoothness is a time-cheating procedure which takes

18 pieces of tool steel of a given crosssection, cut to a given length, clamps them in a multiple fixture, and roughgrinds them to uniform angles and clearances. Single fixtures hold one tool at a time at correct angles for practically automatic final grinding, honing, and polishing to a mirror finish.

• Less Frequent Regrinding—Before the advent of the new lathe tool, the one it succeeded had to be reground after each operation on one of the larger parts of a Cyclone engine. Now the production of the same forging on the same lathe is 28 complete operations before regrinding. Another hand-ground tool formerly turned 30 shafts before resharpening.

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BLASTING

PRODUCTION JAMS is our specialty

DAY BY DAY, production problems get tougher. Yet a way to solve them must be found . . . and quickly. That's where Shell men come in.

They think in terms of new ideas... faster, better ways to get things done. What's more, they know how to combine these ideas with the practical knowledge gained through working with dozens of plants, to help you turn out better products quicker.

The value of this service is already written on the records of many manufacturers who are working today under greater pressure than ever before. Shell men have helped them blast open some tough production jams . . . deliver more in less time and at a lower cost. That is exactly the kind of job we would like to do for you.



SHELLINDUSTRIAL LUBRICANTS

Business Week • October 24, 1942

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NEW PRODUCTS

Riveting Timer

When Murray Corp. of America found that too many rivets were having to be drilled out of airplane wing assemblies and replaced, its research director and his staff went to work on a remedy for the overhitting and rehitting that were at the bottom of the trouble. Upshot is the new Murray Time-Air, a



compact timing and pressure-controlling device which attaches directly to the handle of a pneumatic riveting gun.

Depressing a trigger on the timer starts a predetermined time cycle, which keeps going just long enough to produce a rivet "bucktail" of uniform height and diameter and then stops the gun automatically. Raising the trigger releases the automatic control, permitting the gun to be used for "trim-up" and other work. A pedal-operated model of the device has been designed for use with pedestal-type riveting machines. Manufacturing and selling rights to the Time-Air are owned by Chicago Pneumatic Tool Co., 6 E. 44th St., New York.

Felt-Thiokol Material

It was thought by many product engineers, before the fall of the East Indies, that nothing could quite replace sponge rubber in certain gaskets and strip materials used to absorb vibrations, keep out dust and weather, etc. Now, however, the executives of Felt Products Mfg. Co., 1530 Carroll Ave., Chicago, believe they have an adequate replacement in Fel-Pro Thiokol Strip Material. It is made of a specially processed felt base, treated with Thiokol synthetic rubber, can be produced in 6-ft. lengths and longer, is recommended for "those applications which require a spongy type rubber strip."

Corrugated Accessories

Designed to "bridge the metal shortage gap," H&D Corrugated Waste Bas-

Business Week . October 24, 1942

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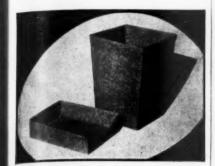
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kets and Desk Trays are inexpensive new office accessory items in the manufacturing program of Hinde & Dauch Paper Co., Sandusky, Ohio. They have

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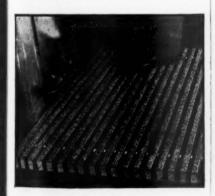
a wood grain finish (either walnut or birch) to match office furniture, are shipped flat ready to be set up quickly.

Superfinishing Attachments

Earlier in the month, Foster Division of the International Machine Tool Corp., Elkhart, Ind., announced the Foster General Purpose Superfinishing Machine (BW-Oct.10'42,p77). Now it is ready with four new portable Superfinishing Attachments for use on the cross slides of practically any turret or engine lathe: Model No. 0, which produces superfinished surfaces of 2 to 5 micro-inches on cylindrical work up to \$\frac{1}{2}\$ in. diameter; No. 1, \$\frac{1}{2}\$ to 3 in.; No. 2, \$\frac{1}{2}\$ to 7 in.; No. 3, 7 in. diameter and up.

Nonskid Grid

There's nothing like a slatted wooden duckboard to rescue a worker's feet from cold or hot, wet or oily floors, but sooner or later it is all too likely to become soaked, slippery, and more of an accident



hazard than a protection. Now, however, Ohio Rubber Co., Willoughby, Ohio, is bringing out the Orco-Grid, a new nonskid oak grid with a walking surface of alundum abrasive aggregate. The aggregate is held in place by "Valim," a composition which promises to be unaffected by subzero cold, above-boiling heat, oil, water, creosote, alcohol, or other commonly used liquids.



Partnership

Since Pearl Harbour, Canada and the United States have gone into virtual partnership for war production. Duplication of effort is being eliminated, information is being shared on production methods and designs, the exchange of supplies clipped of red tape.

For example, the United States now concentrates on one type of propellor, Canada on another. Specifications for a Canadian gun have been altered to suit facilities in both countries. The United States supplied one Canadian shell factory with 500,000 body castings in a hurry, to meet a shipping date; Canada saved the U.S. Navy Department costly delay by delivering 30,000 pounds of optical glass needed for sights. Ten sub-committees coordinate the war production of both countries. The twin arsenals of democracy march together — to Victory.

The Royal Bank of Canada

Head Office-Montreal

This advertisement is published in the belief that our American Neighbours will be interested in the facts presented. More detailed information is available on request to The Director of Public Information, Octawa, Canada.



is so essential to our national war effort that none of us, as individuals or as companies, can afford to be "too busy" to collect and turn in every available item.

The production of Maxim Silencers, safety equipment widely used by our navy, coast guard and merchant marine, depends on steel ... steel depends on scrap . . . your scrap. The Maxim Silencer Company, 86 Homestead Ave., Hartford, Connnecticut.

THE WAR-AND BUSINESS ABROAD

War Weight Starts to Count

Landings in West Africa indicate that United Nations are beginning to make strategic use of their superiority in numbers and equipment. Nazis still have surplus air power.

The headlines this week were over South Pacific datelines, but large-scale fighting is still confined to the Russian front. A new phase of the war also appeared to be developing along the West African coast where U-boat wolf packs harried United Nations convoys landing troops and supplies at points from Freetown to Libreville.

In the Solomons, the decisive blow was vet to be struck. The continued presence of American troops equipped with fighter planes on Guadalcanal and Tulagi islands sufficed to frustrate any Japanese attempt to consolidate its striking force for attacks to the west and south. Loss of this slender foothold would expose important American supply routes to the Far East to attack from land-based Japanese patrol bombers.

Sea Line Held

In southern Russia Stalingrad continued to repel occupation forces, Moz-dok defenders stood between the German armies and the Grozny oil field, and German gains along the Black Sea

shore south of Novorossisk were slow and costly. Units of the Black Sea fleet, by landing behind the German lines to seize and destroy enemy equipment and communication facilities, demonstrated their continued control of the sea in that area.

Troops to Africa

Although British and American convoys were pouring troops into ports along the bulge of West Africa, these operations were under the guns of German submarine coveys and several transports were claimed by the Axis. The Berlin radio reported more than a division of American troops landing at one point. Increasing American strength in this area brought charges of encirclement from Vichy spokesmen at Dakar, and Liberia's entry into the war as an active member of the United Nations waited only on diplomatic for-

Allied concern over the shift of submarine warfare to this area was highlighted by a British Admiralty assertion

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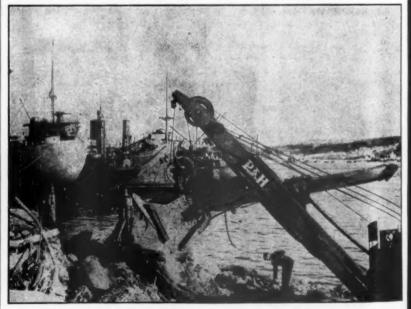
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CANADA'S NEW DRYDOCKS

In addition to building 10,000-ton Victory ships and sub-hunting corvettes, shipyards in Eastern Canada are rapidly expanding repair facilities by constructing an undisclosed number of drydocks. Ships in the background have been repaired and are ready to go back into convoy service.



The newcomer, aceking plastic molded parts, must become a little dizzy as he looks at the plastics advertising. In his attempt to find out how to start—and where he gets the finished product, a must wonder what part each company plays.

In one advertisement, he sees a picture of a finished molded piece. If he writes to the company, he finds they don't make anything like it.... In another advertisement, he sees an injection molding machine. If he writes to the company, he finds they don't mold anything.

The confusion exists because the plastics material manufacturers don't say enough about the important work of the custom molders. So we undertake this program of explanation to speed your work from start to finished product.... The sequence of events is as follows:

Nou tell us what qualities you want in the finished molded part—such a impact strength at various temperatures; redstance to water, salt water, acids or solvents; light transmission; dielectric strength, etc., etc. and etc.

Our engineers and scientists select the Lumarith Plastic that will give you the results.

- 2. Our sales engineers put you in touch with the available custom molders best equipped to mold the piece by injection, compression, transfer or extrusion.
- 3. The custom molder gives you a quotation.
- 4. We work with the custom molder in furnishing the Lumarith formulation that suits all factors of the production technique worked out in relation to dies, heat, pressure and speed.

Remember, success with plastics depends upon the right plastic and the right man at the machine.

We welcome your inquiries and questions.

LUMARITH Plastics

Lumarith Molding Powders (Cellulose Acetate)

Lumarith E. C. Molding Powders (Ethyl Cellulose)

CELANESE CELLULOID CORPORATION, a division of Celanese Corporation of America, 180 Madison Avenue, New York City. Branches: Dayton, Chicago, St. Louis, Detroit, San Francisco, Los Angeles, Washington, D. C., Leominster, Montreal, Toronto.

CELANESE CELLULOID CORPORATION

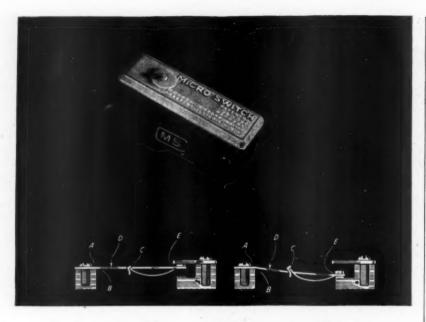
the first name in plastics

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Let's See How This Micro Switch Works

—and why it is so dependable

During the past few months, we have told you what the Micro Switch is, what it is used for, who uses it, the types of housings and actuators in which it can be supplied, how and where it can be used, and some of its technical advantages. Now, let us tell you how it works; why it is so dependable, so precise, so accurate.

The Operating Principle

The Micro Switch principle is different. It involves no reverse bends-no buckling "oilcan" action. The long member of the one piece, three bladed beryllium copper leaf spring "B" is supported in cantilever at "A." The two short members are curved in compression to rest in the notches at "C." These two strutlike springs exert an upward force to hold the electrical contacts "E" together with a force of 40 to 100 grams, depending on the type of switch. The operating force applied at deflects the longer tension member downward in a gentle curve until the upward force of the bowed members is overcome and the contact end of the spring moves downward with the sharp, snap-action which makes clean cut electrical switching. The distance the contacts are separated is controlled to suit the particular problem at hand, and may be as much as 70/1000 inches for high altitude aircraft use. Removal of the force at "D" allows equally fast snap-return to the original position.

The electrical contact moves in the same direction as the operating force. This direct action not only provides accurate performance, time after time, for millions of operations, but should there be a welding or sticking of contacts due to overload, the direct-acting force acts as an insurance policy to break the weld and to put the switch back into service.

All Out For War

Micro Switches are assigned 100% priority for defense work. Civilian use must wait. In the meantime, our engineers will cooperate. Ask for as many copies of the Micro Switch handbook-catalogs illustrated below as your engineering department may require.







Catalog No. 70 contain similar information for air craft and aircraft acces sory engineers, and other whose requirements are similar to those of the aircraft industry.

Micro Switch is a trade name indicating manufacture by Micro Switch Corporation

MICRO ME SWITCH

Manufactured in FREEPORT, Illinois, by Micro Switch Corporation Branches: 43 East Ohio St., Chicago • 11 Park Place, New York City Sales and Engineering Offices: Boston • Hartford • Los Angeles that 530 U-boats had been sunk since the outbreak of the war. Significance of this figure lies in the fact that it indicates sinkings still do not match Axis production of undersea craft.

Watch for Reprisals

British long-range bombers continue to pound factories and transport facilities in northwestern Europe. Following a pattern established some weeks ago, London warned civilians in the Netherlands to avoid strategic points during

coming weeks.

At home, however, Churchill wamed Parliament that overconfidence might lead to negligence and reminded its members that reprisals, which are to be expected, would not necessarily follow any previous pattern. Goebbels seconded this warning a day later but indicated to his German audience that the Nazi airforce was engaged by more pressing duties on the Eastern front. However, it was not sufficiently engaged to be unable to maintain daily reconnaissance flights over England, Wales, Scotland, and Ireland, and less frequent flights over Iceland.

Planes to Spare

Recurring reports of single planes sighted or driven away from these areas would seem to lend weight to predictions that German reprisals would concentrate not on the industrial centers of England but upon the landing fields and tank parks crowded with surplus equipment. Last week's German account of raids on landing boats in South England ports is a reminder that England countered German invasion plans by continued raids on French and Low Country ports in the fall of 1940.

British reconnaissance has apparently detected increasingly strong groupings of Luftwaffe squadrons in areas adjacent to the Channel. Since tabulations of German plane losses on the Eastern front do not tally with estimates of current aircraft production, it is likely that an important reservoir has been accumulating for extensive action on

some other front.

First Signpost

Except in Russia and China, the wat seemed to have entered a watching and waiting stage, every indication pointing to consolidations and readjustments of force pending major action. The United Nations, by extending their activities to new areas in Africa, appeared to be attempting to use their superior numbers and excess of equipment to spread the Axis countering movements thin enough to make any stroke likely to succeed. For the first time the news suggested that allied strategy was implemented by availability of men and materials rather than restricted by shortages and desperate efforts to dam weakening points of resistance.

78 • The War-and Business Abroad

Business Week • October 24, 1942

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New ore field is counted on to safeguard Canada's war needs and perhaps provide basis for a future industrial empire.

Since the Mesabi iron range began producing its rich red dust 50 years ago this month, the only major iron ore discovery developed on this continent has been the one made in the Cuyuna range, southwest of Duluth, in 1911. Now another virgin field of iron in the Lake Superior region, under Steep Rock Lake in Ontario, straight north of Duluth, is ready for a wartime drive toward large-scale production under the stimulus of Canadian government subsidies.

• Discovered in 1930—Steep Rock iron deposits were discovered in 1930 by Jules Cross, a Canadian prospector. Since then they have been explored, at an estimated cost of \$1,000,000, by Cross with the financial aid of Joseph Errington and associates of Toronto, who later organized Steep Rock Mines, Ltd., fortified with geophysical surveys directed by Dr. A. Brant of the University of Toronto. Steep Rock Mines is now headed by Gen. D. M. Hogarth of Toronto.

Proved ore deposits of the field have een placed at 32,000,000 tons of hard hematite. Some unofficial estimates exceed ten times that figure. If the depth of the two major ore bodies is 3,000 feet, said a report in The Northern Miner last year, they would yield 486,-000,000 tons, and "engineers see no reason to limit the depth to 3,000 feet." · Related to U. S. Ranges-Similar hard ore has been mined in the Vermillion range, not far away in Minnesota, at that depth. Geologists reported that Steep Rock deposits were related to those in iron ranges on the United States side which are expected to yield 90,-000,000 tons of ore this year and 100,000,000 next year (BW-Oct.10'42,

Just as Lake Superior iron ore provides 85% of the raw material for the United States iron and steel industry, so Canadians visualize new developments north of the border as the foundation of a new industrial empire in the next generation. Up to now, Canada has been an importer of iron ore, at a rate exceeding the normal value of its gold production.

• Lake to Be Drained—Engineering and construction efforts necessary to bring Steep Rock into commercial utility are such that shipping estimates are dated 1944 or 1945. Mining engineers decided it would be cheaper and better to drain the lake, with the exception of its west arm, and proceed with open-pit rather than deep-shaft operations. This



An Important War Time Suggestion To MOTOR TRUCK OPERATORS

America's war time transportation requirements are already placing capacity demands on your equipment. This condition is going to get steadily more acute.

In your zeal to go the limit in cooperating with the war effort, you are going to be continually faced with the temptation to cut corners on lubrication and maintenance—to send your equipment out on "just one more trip" after it should be lubricated—to put another thousand miles on it before laying it up for a few hours' thorough inspection—to load it dangerously over its rated capacity—to drive it too steadily at too high sustained speeds—in other words, to force it just to get a little more freight hauled this week at the risk of sacrificing many times that amount of freight next week—

Don't let anything make you succumb to that temptation. Keep in mind the truth of the old saying, "Penny wise is pound foolish." Remember that your trucks are worth their weight in gold to America's war effort. Consider that they have become in truth a public trust. Take care of them—keep them hauling—but don't risk your ability to haul ten loads tomorrow, and the next day and the next—for the sake of hauling an extra load today.

There isn't a truck, truck-tractor or trailer on the road today which does not use at least some Timken Bearings. An overwhelming majority have Timken Bearings at every hard service point—front wheels, rear wheels, differential, pinion, transmission, fan, steering gear, steering pivots. Insofar as your Timken Bearings are concerned—barring accident or neglect—they will see you through the war and beyond it. All you have to do is check them up and lubricate them at the regular intervals which you, as a good motor truck operator, know.

THE TIMKEN ROLLER BEARING CO., CANTON, OHIO

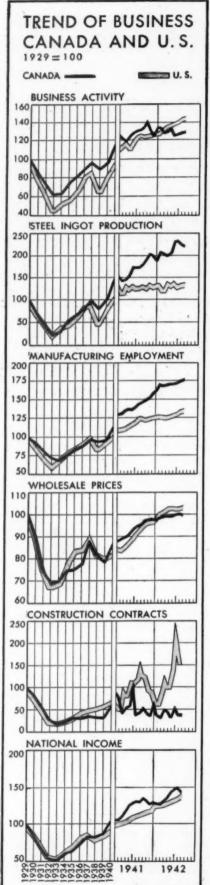




TIMKEN
TAPERED ROLLER BEARINGS

The War-and Business Abroad • 79

Business Week • October 24, 1942



calls for pumping out 125,000,000,000 gal. of water and the construction of two dams and two new river channels.

The Ontario government is reported to be willing to compensate the Ontario-Minnesota Pulp & Paper Co. for the destruction of its power plant through diversion of the Seine River. The provincial hydroelectric commission will replace power lost by the paper company with power from its Thunder Bay system, but about 600 tons of scarce copper will be needed for the power line. At this point, progress will depend upon priorities from WPB in Washington.

• Two Years of Pumping—Draining of

• Two Years of Pumping—Draining of the lake by pumping from below surface ice may begin this winter and is expected to continue for two years. First strip mining will be possible when the lake level has been lowered 50 feet.

The Canadian Department of Munitions and Supply announced it would subsidize the project by paying for a sixmile rail spur from the Steep Rock property to the Canadian National line at Antikokan and for loading docks at Port Arthur, some 135 miles away, as a means of protecting Canada "against a possible shortage of iron ore to meet war requirements." Preliminary arrangements have been made with Otis & Co., Cleveland, for the floating of a bond issue. Reports that the loan would be \$7,500,000 are called premature by the bankers.

• Hard Ore Supplies—From the standpoint of war production, the most important aspect of Steep Rock is its promise of additional hard ore supplies for open hearth steel furnaces. Unlike Mesabi's dusty ore, which would float on top of the steel mix, hard ore drops through the bath of molten metal to act effectively as a deoxidizing agent. It is used at the rate of about 200 lb. of hard ore per ton.

Most of the iron is recovered in the steelmaking process, and when the resulting slag is charged back into a blast furnace, the recovery is practically

Some companies already have experienced a shortage of hard ore, since imports from Norway and Sweden have been cut off, and Canadian ore will supplement or replace imports from South America.

• How the Ore Tests—Preliminary tests of Steep Rock ore have indicated 61% to 63% iron content, with low percentages of objectionable sulphur and phosphorus. Analyses submitted by Cross showed these percentages: iron, 61.42 (the Lake Superior standard is 51); silica, 2.79; sulphur, 0.06; phosphorus, 0.07; manganese, 0.08; lime, 0.20; magnesia, 0.08; and loss on ignition, 7.93.

The Marquette range, discovered in 1852, was the first known deposit of Lake Superior iron. It began to produce in 1855, followed by the Menominee in 1877; Vermillion and Gogebic, 1884; Mesabi, 1892; and Cuyuna, 1911.

Canadian production has been relatively small, amounting last year to 463,000 tons. Canadian iron ore consumption last year was 1,700,000 tons, will run about 2,000,000 this year.

• Other Canadian Deposits—The only currently active Canadian mine is in the Michipicoten district, on the northeast shore of Lake Superior, but previously worked deposits have been Moore Mountain (405,000 tons total from 1908 to 1924) and Magpie (1,068,00) tons from 1913 to 1922). American ranges bordering Lake Superior have yielded about 2,000,000,000 tons in the last 50 years, more than half of which came from the Mesabi range at Hibbing

American Lake Superior ore reserves are estimated at 1,200,000,000 tons, only twelve years' supply at next years rate of war withdrawal. This includes only "commercial grade" ore of 51% iron, probably is conservative in view of the fact that mining companies are taxed on the basis of reserves in the ground, so that energetic efforts to uncover new deposits have been lacking.

• Treated Tonnage—About 10,000,000 tons a year of the American production is concentrated or otherwise treated before shipping. Without new deposit, the treated tonnage might have to me sharply in the next six or seven year. However, uncertainties of war and the rising usefulness of other metals and plastics put any long-range predictions for iron ore into the realm of pure speculation.

The new Canadian development, as officials pointed out, is primarily a measure of war insurance.

CANADA

Labor Sits In

Management-and-worker committees figure importantly in mapping Dominion's contraction of nonessential industry.

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OTTAWA — Management - worker committees, set up at the urging of Selective Service Director Little, are taking an important part in preparing the pattern for the contraction of non-essential industry. They have already figured usefully in the contraction of the newsprint industry to release electric power to war plants and in the transfer of workers from Northern Ontario gold mines to the essential base metal industry.

 Labor Cets Recognition—Two sets of committees are working on the curtalment program—plant committees made up of management and representative



ROM the cutting of keel plates to the severing of the launching straps that sends another Liberty Ship down the ways, today's revolutionary shipbuilding techniques are outgrowths of the widening application of the oxyacetylene flame. Together with electric arc welding, it has made metal shaping in the shipyard so spectacular a break with the past that operations once reckoned in weeks are now being reckoned in hours.

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Hull plates are swiftly cut to size and edges made ready for welding; addly shaped bulkhead sections are accurately formed without delay, miles of piping go into the ship as easily as if hard steel were pliable as wax. Yet the strength and seaworthiness of these flame-cut and welded ships... and the opportunities for conserving materials without sacrifice of strength . . . are greater than ever.

The wartime job of Air Reduction is a dual one:

(1) To keep the equipment, the supplies and the gases flowing out in sufficient volume to meet the demands of these and other metal-fabricating operations throughout industry;

(2) To provide the engineering service and technical assistance that will open new areas of application in which precious time and materials can be saved by the oxyacetylene flame and the electric arc.



General Offices: 60 EAST 42nd STREET, NEW YORK, N.Y.

Magnella-Airce Gas Products Co. General Offices: HOUSTON, TEXAS OFFICES IN ALL PRINCIPAL CITIES

OVVCPV IS DROBUCTION. BON'T WASTE IT

of employees, and similarly composed committees representing industrial groups that have been drawing plans for industry curtailment for submission to control offices in Ottawa. In both cases Little, backed by Labor Minister Humphrey Mitchell, has been campaigning for recognition by industry management of the contribution labor can make in planning curtailments.

The curtailment pattern began to assume form this week as industrial groups submitted their own proposals, formulated in consultation with administrators of the Wartime Prices and Trade Board, the control authority, to the industrial curtailment division of the WPTB. Where these proposals go far enough, in the judgment of Robert Chisholm, division chief, they will be adopted and then administered by Chisholm's aides. Some industrial and business groups are holding out against action on their own initiative, their attitude being that if Ottawa wants to restrict their operations, it will have to fix the terms.

• No Harsh Action Now-Under pressure of an increasing worker shortage in war plants-due to draining of men into the army by the draft and to new war production contracts-Ottawa means business on curtailment. Civilian enterprise is going to be contracted to the limit, but the current bark of Labor Minister Mitchell and Selective Service Director Little is worse than the bite of immediate contraction controls is likely to be for some time. Both management and labor are nervous about what is

Statements by political spokesmen and propagandists that no enterprise should expect to continue in operation if it is not contributing directly to the war effort have been followed by rumors that chewing-gum plants and branches of candy and soft drink industries would be closed. Actually, Ottawa has no intention of extinguishing any enterprise in the manpower mobilization program. Even chewing-gum is considered to have a place in maintaining morale.

• Handling the Manpower-National Selective Service, through regional and local offices across the country, has begun to operate under a secret worker priority schedule that classifies industries and businesses according to their essentiality ratings. Firms with top ratings-war plants only-get first consideration in the assignment of workers. Firms with No. 2 ratings-also mainly war plants-have second choice of the labor supply.

Those with low ratings are supplied with workers only when the needs of all those above them have been met. They cannot hire workers independently without permits from Selective Service, and available workers whom they might hire under permit must also have permits to accept employment.

MARKETING

Dual Radio Check

From now on, Cooperative Analysis of Broadcasting will use coincidental as well as recall method of sampling audiences.

No medium of commercial expression is so solicitously watched for the effect it produces on audiences as network radio. Virtually the moment a new show goes on the air, researchers somewhere begin phoning the public to find out how many dials have been spun in the direction of the latest offering. Yet there has always been a marked cleavage of opinion with respect to the telephone research methods used.

Schools of Thought-C. E. Hooper, Inc., leading private program-research firm, has loudly preached that audiences must be called at the time the program is being broadcast (coincidental method).

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The Cooperative Analysis of Broad-casting-biggest and oldest setup, operating on a nonprofit basis under semiguardianship of the American Assn. of Advertising Agencies and the Assn. of National Advertisers-historically has espoused the idea of phoning after the show is over (recall method)

Now, after years of debating, bickering, and a due share of jaw-snapping salesmanship between the two organizations over their two methods, the C.A.B. has decided to settle the argument once and for all.

• Both Techniques-The solution is simple: The C.A.B. hereafter will rate



SENTIMENT PLUS

Christmas gift-greeting combinations now featured on dealers' shelves hold the Treasury Department's blessing. They contain albums or pockets for

insertion of War Stamps to any amount, making gift values suitably flexible. Cards are the nonprofit (retail price 5¢) project of Greeting Card Industry, Inc., wartime association of about 100 publishing houses.

all programs by both coincidental and recall techniques. Also, it will plug up some holes in the older recall method. make it less vulnerable to attacks from statisticians who want airtight work.

Most common fault of the recall method is that it puts an uneven drain on the listener's memory. When the latter is asked, "What programs did you listen to in the past two hours?" his memory has to go back 120 minutes for some programs, only a minute or two

for others.

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· Staggering the Sample-To extricate itself from this situation, the C.A.B. is nutting an "overlap" technique to work. isteners are still asked to rummage through 120 minutes of time, but a new batch of guinea pigs is phoned every 30 minutes. This staggers the sample, so to speak, by producing answers from one batch of listeners which must hark back a maximum of 120 minutes, a second batch whose maximum is 90 minutes, a third whose maximum is 60 minutes, and a fourth with a maximum of 30 minutes.

The final program rating-that is, the percentage of set-owners reporting they heard the program-is a composite of

the four sample segments.

• Change of Attitude-That this is an important innovation, researchers are agreed. More spectacular, however, is the fact that the C.A.B. has finally vielded to its clients' faith in the newer coincidental method.

The coincidental method, of course, involves little if any memory factor. That is a decided advantage. On the other hand, the C.A.B. has always felt (1) that if a listener couldn't remember a program an hour or two, its effect was lost on him anyway, and (2) that to get a really reliable coincidental survey, an astronomic sample is necessary.

• Pleasing the Customers-Such qualms about sampling didn't seem to bother the rest of the radio world, however. And so the C.A.B. has decided to give the customers what they want. Of the 3,500,000 dialings that will be made in the next year, the recall method has been allotted 1,000,000, and the coinci-

dental 2,500,000.

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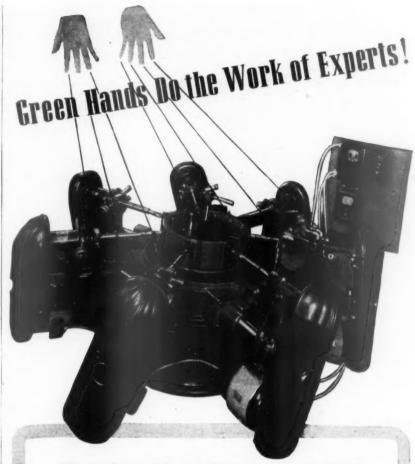
Card

n of

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Because the C.A.B. is now like a church embracing all major faiths, it can hereafter loftily abstain from internecine strife. But a less placid fate seems to be in store for its members. • Which Is Which?-Comical situations may even develop. An actor who brags about the coincidental method's virtues one month (because the coincidental gives him a higher rating) may be forced to recant 30 days later when the recall technique bobs up with the better percentage.

Interesting, too, will be the competitive developments. That the C.A.B.'s two-for-the-price-of-one policy is a direct assault on the Hooper bailiwick is something the latter can't ignore.



How One Manufacturer Licked an Impossible Joh!

Here's a tough production job that experts said could not be done with low cost machines. But it was done—at the Jacobs Aircraft Engine Co. with the help of Delta Drill Presses!

The Problem: Drilling, chamfering and reaming seven tappet holes simultaneously and horizontally in magnesium aircraft engine crank cases—then indexing to drill seven more holes in different positions.

The Solution: The special machine here illustrated, built with seven standard 17-in. Delta drill press heads, utilizing cams, compressed air and a continuous flow of lubricating oil.

The Results: A special machine for a special job built in a fraction of the time and at a fraction of the usual cost. Greatly increased production. A simplified operation employing unskilled labor, thus freeing skilled mechanics for more difficult work.

Delta Drill Presses, Cut-Off Machines, Saws, Grinders and

Abrasive Finishing Machines are so flexible, so adaptable—they can help solve your production problems, too.

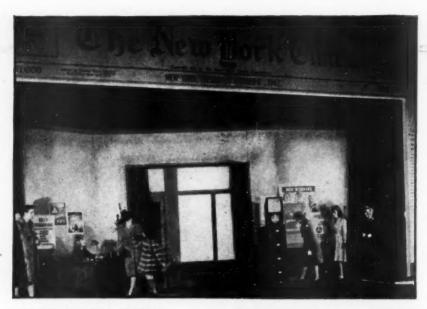
Send for "Tooling Tips"



showing how other manufacturers are taking advantage of Delta machines. And for latest Delta catalog. Get in touch with your nearest Delta Industrial Distributor or write to The Delta Mfg. Co., 973 E. Vienna Ave., Milwaukee, Wis.

Delta Design Always Offers These Advantages

- 1. Low First Cost
- 2. Low Maintenance Cost
- 3. Economical Operation
- 4. Reduced Labor Costs
- 5. Greater Flexibility
 6. Pertability



WAR-FASHION SHOW

The New York Times has stepped aside from its regular business of newsgathering to stage a new-type style show. It dramatizes what the warconscious American gal will wear to be well dressed and comfortable. Designs feature substitute fabrics from processed derivatives of wood, milk, coal, air, water. The model shown in woolly pajamas and Abe Lincoln shawl displays what might be called La Fuel Ration; however, the publicity caption writer describes the model as a war correspondent and adds that she is smartly dressed in an ensemble of pajamas, wool shawl, and matching slippers for "fuel-saving chic."

Chain Goes Co-Ed

Bond Stores, Inc., will add women's suits and coats to its regular line of men's clothes, as draft cuts sales sharply.

Ever since Uncle Sam became the number one purveyor of men's clothing, retailers have had the problem of maintaining sales levels in the face of dwindling patronage. Trade began to-bogganing while purchasing power spiraled.

• Sales Drop Spurs Action—Obviously hardest hit by the trend have been dealers who handle men's clothes exclusively, such as Bond Stores, Inc., coast-to-coast chain. Bond's September sales—showing a sharp drop of 34.7% from last September, compared with a



9.7% gain for the first nine months of the year-called for drastic action, and so the 27-year-old chain fashioned a remedy to fit its needs. It is invading the feminine clothing field for the first time, adding a line of women's and misses' suits and coats. During a trial period the new lines will be offered in only 22 of the chain's 59 stores.

Bond plans to blaze the co-ed trail carefully, sticking to tried and tested merchandising methods, staying in moderate price brackets. (Opening range of ladies' coats is \$19.95 to \$39.95; the range of men's coats is \$25 to \$39.75. A similar price ratio will prevail on suits). Only suits and coats will be offered women during the tryout. The addition of allied lines such as skirts and sweaters will depend on test results.

No final decision has yet been made on how much feminine wear will be made at the company's plants at New Brunswick, N. J., and Rochester, N. Y. Only mannish styles could be produced at either without wholesale alterations in existing production methods, according to Bond Vice President Barney Ruben.

• Pace-Setter—Not the first male clothier to invade the women's field, the Bond chain, with a sales volume of \$45,328,333 last year, is by far the largest to break with precedent, and therefore its experiment will be closely watched by others. Other haberdashers already have bowed to milady's needs and purse with varying degrees of success, while such unrelated chains as Western Auto Stores have installed a line of women's slacks and work wear.

Sales Chatter

"Buy-Lines" took it on the chin when war began, but it has snapped back, now appears in 32 newspapers.

Nancy Sasser's shopping column, "Buy-Lines," was an infant of three months when advertisers began cinching belts in the wake of Pearl Harbor. Then, as war nerves calmed, "Buy-Lines" took it on the chin again when some of its clients went into arms production.

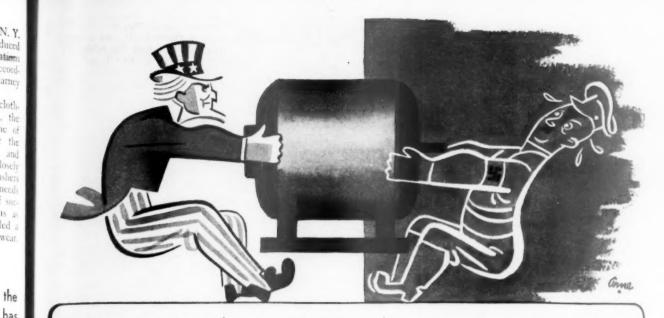
• Soap to Nets—Through it all, Miss Sasser continued her saucy chatter while trying to maintain a grip on the cleven accounts with which she began her national column in September, 1941 (BW-May24'41,p44). Promoting the column to papers was Newspaper Groups, Inc., New York.

At the expiration of her contract with Newspaper Groups, the columnist incorporated herself as Nancy Sasser, Inc., taking complete charge of the feature which plugs anything feminine from soap to (hair) nets. Now, with 32 papers, "Buy-Lines" numbers 24 advertisers as present and past clients, promotes seven products of six companies.

New Fields—Having incorporated and opened a Chicago branch, Miss Sasser plans to promote good-will ads for warcasualty clients, such as silverware and electrical appliance makers, and also to swing "Buy-Lines" into such new fields as men's gift articles.

The column appears weekly in such papers as the New York Times, Chicago Tribune, Miami Herald, San Francisco Chronicle, and Seattle Times. Rates, which have followed expanded circulations, range from \$19.10 per line for an insertion in all 32 papers, to \$2.60 per line for insertion in five Pacific Coast publications. Most contracts run 13 weeks at an average cost of \$802 per insertion in all papers that "Buy-

Lines" serves,



HOW MUCH OF YOUR MOTOR CAPACITY IS ON THE AXIS SIDE?

THREE "MOTOR-WISE" WAYS TO SAVE SCARCE MATERIALS

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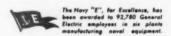
YOU CONTRIBUTE TO THE WAR EFFORT BY HELPING US CONSERVE COPPER, ALUMINUM, AND STEEL WHEN YOU ...

- -decide upon motor size strictly on the basis of actual expected load, following WPB motorloading recommendations.
- -use standard and least complex motors. Wherever possible, use open, a-c single-speed, singlevoltage, squirrel-cage induction motors rated 440 volts or higher.
- -fully utilize existent motors by increasing motor loading where possible (see WPB motorhp recommendations), and by regular maintenance and reconditioning.

MOTORS NEEDLESSLY LARGE FOR THE JOB-plus the oversize distribution circuits they require—may be 25 per cent or more on the side of the enemy! That's the percentage of copper and other scarce materials frequently wasted by overcautious motor specifications-by buying the "next larger size" than a machine actually needs.

The extra amount of critical material used in the oversize motor itself is only part of the loss. Operating a motor continuously below its rated capacity can mean wasted copper all the way back to the power plant. Thus, even your present motors should be so applied as to avoid "overmotoring," wherever possible.

Why not check with your engineers to see if your peacetime motor policy can be modified in the cause of conservation? You'll be helping to make more metals available where they're needed most to win the war. General Electric, Schenectady, N. Y.



BUILDER OF TRI CLAD MOTORS



Fair Trade Upset

Denver judge rules that Sherman Act violation results from liquor industry's misuse of price maintenance contracts.

Federal Judge J. Foster Symes ruled on a basic point in refusing to quash indictments charging illegal price fixing by 83 liquor industry corporations, associations, and individuals in Colorado. For although the U. S. Supreme Court has given its blessing to state fair trade laws—on which the defense based its case—he decided that actions under those laws that permit the fixing of resale prices to protect trade names from unfair competition could—and did—violate the Sherman Act which forbids combinations in restraint of trade.

The ruling of the Denver judge, who set a similar precedent in building materials cases earlier this year (BW-Feb. 21'42,p49), places virtually every major liquor company and association in the position of standing trial or entering pleas on accusations that they conspired to raise, fix, and maintain wholesale and retail prices in interstate com-

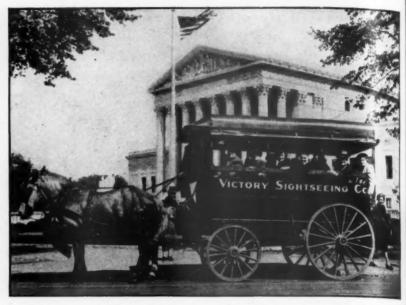
Judge Symes' ruling on the sixmonths-old bills (BW-Mar.21'42,p65) contends, in effect, that legal privileges cannot be used for an illegal purpose and that in points of friction between state and national laws, federal acts take precedence.

He overruled defense technicalities that repeal of the 18th amendment exempted liquor from interstate provisions of commerce laws and that the alleged violations were intrastate in character since they took place in Colorado.

AIR FREIGHT MAGAZINE

A new trade publication is making its debut in the chorus for more, bigger, and better airplane cargo carriers—as a wartime reality, as a post-war goal for domestic and international shipping. Brainchild of John F. Budd, the monthly magazine, Air Transportation, is issued as a supplement to his established American Import & Export Bulletin. Budd also publishes Custom House Guide.

The October issue, Vol. I, No. 1, makes it clear that Air Transportation will deal exclusively with factors of shipping by air from the viewpoint of manufacturers, shippers, importers, exporters, and forwarders. One section of the 48-page, "digest"-size edition contains tables of world wide air transport rates and listings of federal air-mail regulations. Publisher Budd declares its policy will not be anti-ship, anti-rail, or anti-truck, but will be pro-air.



THE DAPPLE GRAY LINE

Despite the ban on the operation of gas-driven sightseeing buses, visitors can still do the nation's capital in the war style. James J. Grace, who for the past 40 years has made a living by guiding tour parties around Washington, took out some business insurance in the form of a horse-drawn bus,

LABOR

Air Plant Wages

Conference promises that pay will at last be stabilized in West Coast industry, though North-South difference may last.

Decentralization of National War Labor Board activities, foreseen for some time, will be brought nearer by hearings, concluded last week end, to obtain data upon which to stabilize labor conditions in the Pacific Coast aircraft industry. Divergent wage and labor supply problems, which brought a minority report from Boeing Aircraft Co., Seattle, recommending 95¢ an hour starting pay instead of 80¢ previously advocated by eight Southern California plants, will cause Chairman Paul R. Porter, representing NWLB, to recommend establishment of a Pacific Coast aircraft stabilization committee.

It is probable that that committee, patterned after one Porter set up for the shipbuilding industry, will be duplicated in other sections of the nation for aircraft and later, conceivably, for all other war industries.

• Explaining Boeing Bombshell—Although the Boeing wage proposal was identical, in lower brackets, with that asked by the unions, it merely reflected

the divergence of labor supply, living costs, and other factors between the Pacific Northwest and Southern California areas. In Boeing's area 95¢ an hour is paid shipyard beginners, and they outnumber aircrafters about 2½ to 1. While the average hourly pay rate for shipyard workers in the Los Angeles area is also higher than in the aviation plants—about 42% higher—the ratio of employees in the two crafts is the reverse of what it is around the Seattle section.

Management and labor were agreed that minimum starting wages should be increased. They disagreed on the amount, except in the Boeing instance. They agreed on greater uniformity of job classification but disagreed on how to achieve it. Management favored automatic time increases for beginners but advocated the merit system for increases in upper brackets. The C.I.O., through Richard T. Frankensteen, asked rigid job classification and uniform pay throughout the industry, in all sections of the nation, without regard for variations in living costs.

• Wages Higher Elsewhere—Sharpest thorn in the side of both management and labor is the higher wage scales that exist in aircraft plants in other areas of the nation. Management avoided mention of them, but labor representatives read into the record figures that purported to show what the average wage



* * When the shooting ends in Victory for the United Nations, the company having access to the latest production ability will survive the pains of reconstruction.

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* * The warning is plain. Now is the time to plan ahead! Now is the time to line up sources of production!

* * The best place to find this help is in the present war production industry. For instance, we at Spriesch are supplying the war effort with aircraft armament, Cannon Parts, Bomb Release Shackles, Automatic Bomb Release Racks complete... plus aircraft hardware. Each part is made to exact specifications, yet must be rushed out under emergency schedules.

* * * To meet this problem we have supplemented our long experience with original methods entirely new to industry, plus latest type machines and tools.

* * Clearly, by planning now to use the facilities of Spriesch modern war production ability, you will be a step ahead of your competitors.

A step that may change your future to leader in your field! Joseph J. Cheney, President.



rate was in the following localities: Willow Run, \$1.13; Detroit, \$1.10; Buffalo, 98¢; and along the East Coast, 84.9¢. These were compared with a California average of 83.9¢. Labor contended that migration of aircraft workers from Pacific Coast plants to those higher-scaled areas, and to shipyards of the Pacific Coast, is the most pressing problem at present besetting the industry locally. Management admitted the high rate of labor turnover but argued that the solution did not lie solely in granting wage increases. Boeing's statement, incidentally, admitted a labor turnover of 94.8% in its plant during the past nine months.

The hearing, as contrasted with the earlier conference of July 6 to 16, which ended abruptly when OPA stepped in and virtually shut the door on wage increases for aircraft workers (BW-Jul.18 '42,p78), produced voluminous data in support of contentions of all parties. These statistics, which will form the basis of Porter's recommendations, may result in more than one wage scale being ordered by NWLB. Its decision will be made within two months and is expected to find acceptance by labor, even if it does not go beyond the wage limits recommended by management.

32 pp. of McNear

T.P.&W. president uses belated 1941 annual report to tell what he thinks of U.S. operation of his railroad.

It's a safe bet that the Office of Defense Transportation will not leave standing without a sharp rebuttal the 32-page philippic written by George P. McNear, Jr., as his presidential preamble to the long deferred 1941 annual report of the Toledo, Peoria & Western R. R. It was available for study in Washington this week, and like most other things individualist McNear has had to say about labor problems, it made government officials furious.

• Waste Is Charged—In it, the T.P.& W. president, whose road is now operated by federal agents because he refused to accept a National War Labor Board ruling in a protracted labor dispute (BW—Mar.28'42,p15), accuses the government of waste and inefficiency. He charges that under ODT operation "government management has adopted the featherbed rules, virtually as demanded by the brotherhoods." He offers figures and tables in support of his contention that "grossly wasteful operations" have characterized the road since its seizure by Roosevelt order last March.

Also on the record last week was a "final determination" unanimously

C.I.O. ECONOMIST



Bespeaking the changed emphasis of union strategy, the Congress of Industrial Organizations set out to find a top-flight man to become their new director of the economics division. They have picked J. Raymond Walsh, who resigns a professorship at Williams College to take over the post

College to take over the post.

Walsh's job will be to help steer
C.I.O. unions through the maze
of government procedure, to equip
them with briefs and arguments
for swaying boards, bureaus, and
administrators, and to keep union
labor sophisticated about its stake
and interests in economic developments everywhere.

promulgated by the National War Labor Board in the case of T.P.&W. R.R. and the railroad brotherhoods.

• Formal Reiteration—The board's final word on the case was simply a formal reiteration of earlier directives and, except for a difference on the retroactive date for ordered wage increases, an approval of the arbitration award of Judge Hilliard of the Colorado Supreme Court, who acted as arbitrator last May in proceedings which McNear refused to attend.

Washing its hands of the case, NWLB told McNear that it hoped he would now rise to his wartime responsibilities, accept the decision of the board, and resume active control of his road. However, it left no room for doubt about the conditions under which he could come back by declaring that the road would not be returned to his ownership "unless and until there is full and complete compliance with this directive order."

• Directors Quit—McNear's report reveals that all five members of his board of directors resigned in the period from Sept. 18 to Sept. 24 while his 32-page blast was in preparation.

C.I.O. vs. Lewis

Issue is clearly drawn in NLRB elections at Harbison. Walker plants; in first test Murray forces score landslide.

Winning a thumping victory in the first round, Congress of Industrial Organizations President Philip Murray is about to undergo another test of strength in a feud with his "former friend," John L. Lewis.

The test comes late this month in National Labor Relations Board elections to select a bargaining agent among employees of Harbison-Walker Refractories Co. in five Pennsylvania firebrick plants. In one corner is Murray's C.I.O. United Clay Workers Industrial Union. In the other corner is Lewis' United Construction Workers of District 50, the United Mine Workers' "catch-all" union, which is seeking to organize anybody organizable.

• First Round for C.I.O.—Lewis' forces were routed by a vote of 195-to-0 recently in the first NLRB balloting among Harbison-Walker workers at the Clearfield (Pa.) No. 1 plant. Now the stage has been set for Harbison-Walker employees to choose between the two opposing unions at elections to be held Oct. 28 at the company's Barrett, Retort, and Clearfield No. 2 works, and Oct. 29 at the Wallaceton and Lower Woodland plants. Also on Oct. 29, employees at the Upper Woodland, Clearfield No. 3, and Clearfield machine shop plants will ballot "yes or no" on representation by the clay workers union without District 50 being listed on the ballot. The eight plants employ about 1,000.

No voter has been wooed by any politician more ardently than have the Harbison-Walker workers.

• Family Proposition—The jurisdictional squabble started last June when John L.'s brother, A. D. (Denny) Lewis, signed an agreement with John L.'s daughter, Kathryn Lewis, and Ora Gasaway, John L.'s former bodyguard, to merge the United Construction Workers Organizing Committee with U.M.W.'s District 50. When District 50 attempted to take over the U.C.W. O.C. contract with Harbison-Walker, the company's employees balked.

The C.I.O., whose feud with the U.M.W. has now been climaxed by the miners' withdrawal from the C.I.O. (BW-Oct.17'42,p87), issued industrial union charters to the clay workers. Caught between the two C.I.O. factions claiming bargaining rights, the company, after its contract expired July I with the U.C.W.O.C., petitioned the NLRB for the elections.

Anthony J. Federoff, C.I.O. regional



THE Gulf South ANSWERS!

Who said the Liberty Bell could ring no more! Its peal was never louder, its message never clearer. And the Gulf South is joined today with all America, making the voice of Liberty sound throughout the world.

America knows, as the Gulf South knows, that this is no ordinary war, but a race to outproduce, in iron and steel and aluminum, the materiel of our enemies.

The Gulf South is blessed with ample Natural Gas fuel—burning night and day to convert the Gulf South's wealth of raw materials into implements of war. The whole United Gas organization realizes, as all industry does, that we must win this war to preserve the freedoms we hold dear. Natural Gas and other rich resources of the Gulf South will stay on the job until Victory comes.

Ring out, Liberty Bell! Your hallowed peal is vibrating throughout the land, America fights to the finish when her freedoms are at stake. America must—and will—win!

BUY WAR BONDS . . . HELP AMERICA'S VICTORY



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The Gulf South

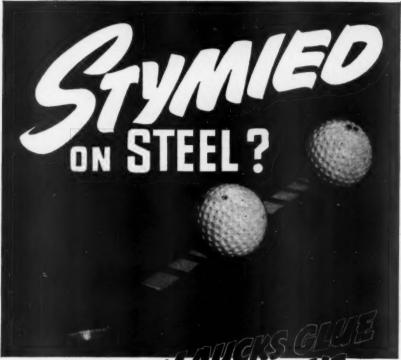
Working with All America for VICTORY

This Advertisement Published By

UNITED GAS PIPE LINE COMPANY

A Natural Gas transmission Company built in peacetime . . . now dedicated to serve wartime fuel requirements throughout the Gulf South. FOR TEXAS, Mail received at: Beaumont, Dallas, Fort Worth, Houston, Longview, San Antonio and Wichita Falls. For Louislawa, Mail received at: Baton Rouge, Lake Charles, Monroe and Shreveport. For Mississippy, ALABAMA and FLORIDA, Mail received at: Jackson, Miss.

COPR., 1942, UNITED GAS PIPE LINE CO.



WOOD and LAUG OR LAUCKS RESINS CAN HELP YOU-

LAUXITE SYNTHETIC RESIN GLUES

Waterproof • Fungus-Proof Heatproof

For

AIRPLANES & PARTS PREFABRICATED HOUSES GLIDERS

LAMINATED BEAMS LAMINATED ARCHES TORPEDO BOATS ASSAULT BOATS AMMUNITION BOXES

LIFE RAFTS, ETC. Send for information about possibilities of wood-andglue in your business.

WHATEVER you make, whatever you do . . . if you've been stymied for want of steel or other critical materials . . . investigate at once what Laucks Synthetic Resin Glues and

wood can do for you.

Every day in "priority pinched" businesses . . . as well as in wartime industries like aircraft and boatbuilding . . . the miracle of modern glue is transforming wood into welded units with the strength of steel,

Laucks Glues are speeding vital war produc-

Laucks Glues are speeding vital war production, providing alternate products of equal of better strength, safety and service . . . actually rescuing businesses which feared they might be "blacked out" by priorities.

Better find out today what wood and Laucks Glue can do for you! And remember, it's no accident of war that confers leadership upon Laucks . . . but rather, 20 years of research and performance in this highly specialized field. For full information, write or wire: full information, write or wire:

I. F. LAUCKS, INC.
In U. S. Address Inquiries to—
SEATTLE—911 Western Ave. CHICAGO—6 N. Michigan Ave.
LOS ANGELES—859 E. 60th St. Factories: Seattle, los Angeles, Portsmouth, Va., Lockport, N.Y.
In Canada, Address Inquiries to—
I. F. LAUCKS, Ltd., Granville Island, VANCOUYER, B. C.
HERCULES-LAUX-MERRITT, Ltd., STANBRIDGE, QUEBEC



UNION VS. UNION

Best known as a labor union. the Brotherhood of Locomotive Engineers also is an employer. As such, it had a dose of labor trouble last week, when the A. F. L. Hotel and Apartment Service Workers Union struck at the B. L. E. owned Park Lane Villa (apartment hotel) in Cleveland, to enforce its demand for a union shop.

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While the two-day strike was in progress, Alvanley Johnson, brotherhood president, talked tough like any other employer in similar circumstances, asserting that the help was well paid and that the A. F. L. had failed to demonstrate a majority. The strikers went back to work with "substantial increases" in pay, vacations after a year's service, shorter hours, union maintenance of membership.

director, viewed the 195-to-0 Murray victory in the first election as indicating the clay workers wanted to cast the lot with the "democratic leadership" of Murray rather than with the "Lewis family control and dictatorship." Lewis adherents simply maintained that the real test was ahead.

BALTIMORE PLAN CLICKS

The War Manpower Commission's experiment with voluntary manpower control in Baltimore (BW-Oct.3'42. p17) has ended. From now on, it's the Baltimore Plan, and its graduation from the experimental stage was signalized this week when WMC Chairman Paul V. McNutt directed that it be extended to eleven other areas.

The states of Washington and Ongon, and Buffalo, Akron, Louisville, Mobile, Oklahoma City, San Francisco, Los Angeles, Phoenix, and St. Louis are the labor markets placed under the Baltimore Plan, and other production zones will be added from time to time. The Baltimore idea calls for agreement by war plants and labor leaders on the following measures:

(1) No war plant is to employ a worker from another war producer unless the worker first obtains a release from his employer.

(2) War production management will pledge itself to employ local labor wherever possible, thereby discouraging the influx of workers from other areas.

(3) In the event that an employer is unable to secure essential help from the local labor reservoir, he is to recruit outside labor only through the United States Employment Service.

(4) Employers are to assist WMC officials in transferring workers from nonessential to essential jobs.

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Garment Workers spark drive for public relations department to take the heat off labor unions.

Generally overlooked in the spate of flashier items emanating from the American Federation of Labor's convention in Toronto last week, one of the meeting's closing acts—authorization of an imposing public relations department—promises to be of greater long-run significance than almost anything else the federation did at its 62nd annual session. It is getting close attention, particularly from several New York advertising agencies and public relations firms.

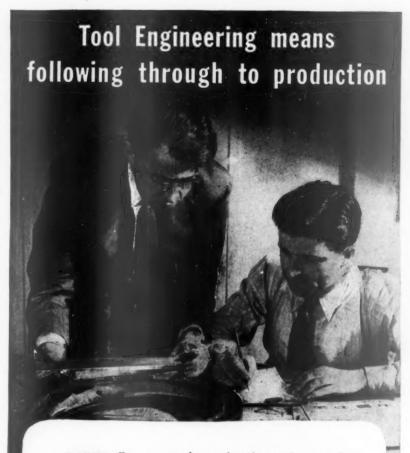
• Sponsored by the I.L.G.W.U.—The A.F.L.'s new move resulted from a resolution submitted by delegates from the shrewd, progressive International Ladies Garment Workers Union. Maintaining that large sections of the public have no adequate understanding of the aims, ideals, and achievements of organized labor, that suspicion and prejudice against labor is "systematically fomented and financed by antilabor elements in business, industry, and public life," the resolution held that support of public opinion is necessary if union gains are to be held.

By adopting it, the convention instructed and empowered A.F.L.'s executive council to "establish a public relations department which shall be adequately financed . . . to widen all avenues of contact between organized labor and the general public; to interpret the true economic and social aims of organized workers to the American



"Promotion-minded" Julius Hochman of the I.L.G.W.U. has finally scored in a long campaign to get the A.F.L. to undertake a big public relations program for organized labor.

Business Week • October 24, 1942



HECKER offers you complete engineering service on tools, jigs and fixtures. We'll design and build a single jig or do an entire tooling-up job for you. Our engineers will even place the equipment in production, if you need that help.

HECKER tool engineers know how to get maximum production from machine tools and their operators, because they know what to expect of each. They have the advantage of seeing many of their own designs go to work in the HECKER manufacturing plant, where we're producing precision parts for the leading airplane builders.

HECKER tools, jigs and fixtures are helping some of the country's biggest aircraft and war-production plants maintain manufacturing schedules at maximum efficiency. They'll do the same for you. Tell your tooling problems to A. W. Hecker, 1974 East 66th Street, Cleveland, Ohio.



When Oster, motors became available

... the fractional h.p. field gained a new, but wellseasoned, dependable source

NEW — because Oster electric motors had not previously been offered in the market.

SEASONED — because Oster has been building similar motors for 15 years, exclusively as original equipment for its own appliances.

DEPENDABLE — because Oster's peacetime requirements have always called for the very qualities which





SHOP EQUIPMENT ready made Bench can tell you the exact total costs on any given equipment. Our deliveries are better than average. Let us know your requirements.

STANDARD PRESSED STEEL CO.
BOX 598 JENKINTOWN, PENNA.



people; and to present an undistorted picture of trade unionism as a constructive force . . . "

• Hochman's Sales Job—A speech by I.L.G.W.U.'s promotion-minded vice president, Julius Hochman—whose New York Dress Institute, founded last year to push the sale of union-made New York dresses, has already collected \$1,500,000 for promotion purposes (BW—Dec.21'40,p26)—won convention approval for the resolution. The executive council was directed to give careful consideration to ways and means and, in cooperation with the international unions comprising the federation, to make plans for attaining the objectives.

Hochman predicted that, unless organized labor did a full-dress public relations job, it faced the same postwar retrenchment which ate away its power and influence in the twenties. He analyzed what he called "the far-flung propaganda activities" of the National Assn. of Manufacturers. Describing the N.A.M.'s program as one of the things "we of the labor movement are up against," Hochman called for matching and outdoing "the large-scale advertising, national and local . . . which distorts and misrepresents labor's proud record."

• Treasuries in Good Shape—One of the factors accounting for the convention's readiness to accept the Hochman proposals is the comfortable condition of union treasuries. With union membership at an all-time high and growing all the time, current revenues are at record levels. There are fewer strikes than at any time since 1930, and the bulk of those that do crop up are "unauthorized." This means that they get no financial support and that union expenditures, therefore, are inconsequential.

Most Toronto smoking-room talk on the federation's public relations plans used the convenient "million bucks a year" round number in discussing a budget. The A.F.L. can afford that, and it can get its million by a per capita tax on members of $1\frac{1}{2} \neq a$ month if needful.

STEELWORKERS' SWEEP

C.I.O.'s United Steelworkers of America (the former Steel Workers Organizing Committee) is continuing its clean sweep of the National Labor Relations Board collective bargaining polls in which it seeks to become exclusive bargainer for more than 90% of the steel industry. Latest results show a 15,535 to 703 vote victory for the C.I.O. in six plants of Crucible Steel Co.

Observers expect that, when all the steel industry balloting is over, the union will hold maintenance of membership contracts with every major steel producer save American Rolling Mills and Weirton Steel. These two firms are not involved in the elections.

Plug Wage Hole

In Ford decision, NWLB makes it clear that increases will not be made "to aid in prosecution of war."

Flatly rejecting the \$1-a-day wage increase which C.I.O.'s United Automobile Workers had asked for 115,000 Ford Motor Co. employees, the National War Labor Board gave its first important interpretation of the phrase in the executive order on economic stabilization that permits pay raises above the Sept. 15 level "to aid in the effective prosecution of the war."

 Precedent of Patriotism—Speaking for a unanimous board, Wayne L. Morse, public member and dean of the University of Oregon law school defined an important NWLB policy:

"The wages now paid at the Ford plant must now be recognized as being relatively good wages, not involving maladjustments, inequalities, gross inequities, or substandards.

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"It would be a reflection upon the patriotism of Ford employees to attempt a justification of a general wage increase upon the basis of any argument that such an increase should be granted under that provision of the executive order which states, 'to aid in the effective prosecution of the war.' An



DRILL THAT SCRAP BUILT

Sam Carter (left) had war orders for his Los Angeles machine shop, but his priorities were too low for quick delivery on a new multiple drill press. So he took the transmission from an old Ford truck, linked it up to the drill heads with standard universal joints, invented a hydraulic bed to lift his work to the drills, and canceled his order for a new drill press.



TO PROPERTY OWNERS who have not yet purchased WAR DAMAGE INSURANCE



rinstr, let this be understood:
that in writing War Damage
insurance we are acting in behalf
of the Federal Government—as
are the agents and brokers of the
country through whose offices you
can purchase a policy. Consideration of War Damage insurance is
urged upon every householder and
business man. Its purpose is to protect property owners of America,
and it is to them that this message
—this warning—is addressed.

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Not whether, but IF . . .

You own a store in New Hampshire, a farm in Illinois or some furniture located in an apartment in California. It isn't a question of whether or not there is going to BE a bombing or an invasion. The question is how you would be fixed without

any insurance protection IF there WERE one.

You don't buy fire insurance with the idea that there is going to be a fire, nor windstorm insurance* with the idea that there is going to be a tornado, nor automobile liability insurance with the idea that you are going to injure someone with your car.

Think this over . . .

If an attack comes, no one can say when or where it will come or what damage will result.

It is a shorter distance by air from Tokio to Salt Lake City than from Tokio to San Diego.

Two incendiary bombs might start a conflagration that your regular fire insurance policy wouldn't protect you against. Bombs don't always drop on their objectives. Planes crash wherever they happen to be put out of commission.

Part of the strategy of attack is to do the unexpected. The unexpected might mean a raid on *your* city or town.

See your Insurance Adviser

The purpose of this advertisement is not to scare you but to tell you that War Damage insurance is available—to warn that losses can not be paid unless you have an insurance contract. The way to get such a contract is to see an agent or broker. He will be glad to tell you all about it—will explain how little it costs. (You can insure a \$5,000 home for only \$5.) After a raid will be too late!

*By the way, ask your agent or broker to tell you about "Extended Coverage."

Buy War Bonds!

HARTFORD INSURANCE

Hartford Fire Insurance Company . Hartford Accident and Indemnity Company

THE TWO HARIFORDS WRITE PRACTICALLY EVERY FORM OF INSURANCE EXCEPT LIFE



HARTFORD, CONNECTICUT

'all-out' production effort on the part of American workers does not have to be bought or bribed by inflationary general wage increases which in turn endanger our war economy and in the long run decrease real wage rates."

• Not Like Other Auto Cases—NWLB recently granted a 4¢ hourly wage increase to 225,000 General Motors Corp. employees and 90,000 Chrysler Corp. workers; but it held no raise was due in Ford, under the "Little Steel" formula calling for pay increases totaling 15% for the period from January, 1941 to May, 1942, in order to compensate for added living costs. This was so, the board contended, because employees at Ford received a 25% to 28% increase in their basic hourly rate in the summer of 1941.

Labor members joined with public and employer members in the decision, and labor circles expected U.A.W.-C.I.O. leadership to comply promptly. Ford employees may not like it, but there seemed little prospect that private bargaining could get wage advances like those won by some Aluminum Co. of America workers after NWLB refused them a wage advance.

• Other Issues Settled—Except for overtime pay, other features of the Ford contract, which provide for continuance of the closed shop and the checkoff, had been agreed to previously by the company and the union with the help of an NWLB mediation panel. The board has suggested further direct negotiation on the overtime pay question.

FINANCE

Ration-Banking

Commercial institutions are generally eager to take over the job of clearing coupons if test in Albany works out well.

Commercial banks are watching enthusiastically, if a trifle uneasily, while the Office of Price Administration puts the final touches on its plans for "ration-banking." Most bankers are eager to take over the job of clearing ration coupons. Besides the patriotic angle, they think it will be a first class public relations project. But as yet, they aren't quite sure how much they've let themselves in for.

• Proving Ground—Both OPA and the banks will know a good deal more about ration-banking when they finish with the six-week experiment which begins in Albany, N. Y., Oct. 26. Object of this preliminary trial is to take the kinks out of the plan and get a measure of how much work it will involve. Unless the system falls flat in Albany, OPA will put it into effect on a nation-wide basis as soon as the experiment ends.

As it stands now, OPA's scheme is an adaptation of the English method of clearing ration coupons. Basic is to set up a system of book cred that will cut down handling of coup and provide a flexible system of the fer. OPA has been getting a lot of the complaints from dealers who say present rationing system is so dim that it paralyzes trade. With ration in prospect for a growing list of extial commodities, authorities are about the system will hogtic itself if it is simplified.

• Aid for the Dealers—Ration-bank would have no effect on consumer, if it works, it will make life a good simpler for wholesaler and retail Under the present system, dealers he to go through an elaborate exchange coupons every time they want to mew supplies of rationed goods.

First they assemble the coupons in have received from customers and change them for higher denomination at the local boards. Then they see tickets to their suppliers all with their orders. Inevitably this mean lost coupons, standing in line, countries and recounting.

• Like Deposit Accounts—Under ration-banking plan dealers will be their coupons to their regular banks a open a ration account comparable to ordinary deposit account. When dealer orders more goods, he will go his supplier a "transfer voucher" dra against his ration account.

In all respects the coupon accounwill be like regular deposit account except that they will be in commod units instead of dollars and cents. But rowing and overdrafts will be published.

Substituting book credits for the cumbersome exchange of coupons we case the pressure on understaffed to boards, but it presents the comment banks with a collection of troubleson new problems. Bankers are watching the Albany experiment anxiously to a just what headaches are in store to them.

• On Nonprofit Basis—Banks will had dle the coupon accounts on a nonprofit basis, but OPA will make up their openses. One object of the Albany in is to get a measure of costs and wo out a formula for reimbursing the ban for the expense involved.

Biggest stumbling block, howed is likely to be manpower. The draft is come down hard on bank personne and a lot of young tellers and bookeepers have taken jobs in war plant Another trouble spot is the shortage accounting machines. Some banks a ready have their hands full keeping the elaborate records that state and federal laws require. A few fear that to take



MADE FROM RECLAIM

Rubber Director William M. Jeffers removes a finished reclaimed-rubber tire (for essential civilian use) from a mold on the Firestone production line. Looking on are Firestone Tire & Rubber Co.'s Chairman John W. Thomas (left) and President Harvey S. Firestone, Jr. AMERICAN

KEEP THIS EGG WARM...IF YOU WANT IT TO HATCH

Maintain your hard-won contacts and keep your name and brand alive in Latin-America, our most accessible and promising post-war market, by advertising NOW in *B.P.I.C. Specialized Export Publications. Write for brochure "What the Export Advertisers Are Saying". No cost, no obligation.

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AMERICAN VISCOSE CORPORATION NOTICE OF DIVIDENDS. The directors of the Amer-NOTICE OF DIVIDENDS. The directors of the American Viscose Corporation today declared the regular quarterly dividend of \$1.25 a share on the 5 per cent cumulative preferred stock, and a dividend of 50 cents a share on the common stock, payable November 2, 1942, to stockholders of record at the close of business on October 19, 1942.

WILLIAM H. BROWN, Secretary and Treasurer Wilmington, Del., October 7, 1942.



copy. Write to American Hot Dip Gal-

vanizers Association, Inc., Pittsburgh, Pa.

THE MARKETS

After a four-day shakedown period around the turn or the week, the stock market renewed its upsurge at midweek and broke into new high ground for the year on relatively heavy trading. As was the case last week, the advance was on a broad front and was led by the old-line favorites. Among the issues reaching new 1942 highs on Tuesday were Chrysler, General Electric, International Harvester, Standard Oil of California, Union Carbide, and U. S. Gypsum.

• Rails Fail to Follow-Market men were inclined to be a little cautious, however, due to the fact that railroad securities did not join in the rise. Carrier stocks and investment grade bonds were unchanged to slightly lower, while bonds of reorganization roads, after reaching a new high for the year on Monday, fell off sharply.

Afflicting the reorganization roads' issues was the fear that legislation will soon be adopted to halt all trading in securities of railroads going through the wringer or to impose prohibitively heavy taxes on profits realized through such trading. The drop on Tuesday was touched off by release of a letter from Dr. Walter Splawn of the Interstate Commerce Commission to Walter F. George, chairman of the Senate Finance Committee.

• Speculative Evils-Dr. Splawn made the point that speculation in these securities—outstanding in the amount of over \$4,500,000,000—has increased markedly in recent months due to the war-induced rise in railroad earnings. He stated that those who are active in such speculation buy in the hope of large profits, which depend not only on the intrinsic value of the securities, but also, and perhaps even more importantly, on the possibility of obtaining recognition from the courts at inflated values. Unless this recognition is secured, wide spread opposition to the plan of reorganization will develop, resulting in increased litigation, waste of time, and higher expenses chargeable against the bankrupt estate.

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Another major factor, according to Dr. Splawn, is that such speculation tends to enrich outside speculations at the expense of the bona fide owners of the property, a result directly contrary te the expressed purpose of Section 7 This contention that the Johnny-come lately should have no voice in reorganizations, much less a nuisance value, has come to be widely espoused in recent

years.

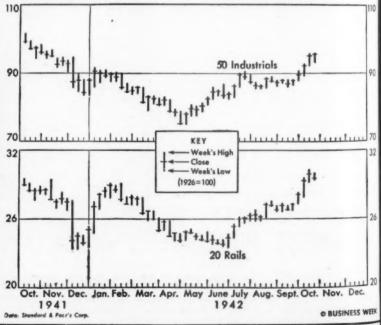
• Legislation in the Mill-About two weeks ago Sen. Burton K. Wheeler introduced an amendment to the new tax bill which would have imposed a 90% tax on all profits made in securities of reorganization rails, whether realized before or upon completion of reorganization proceedings. However the tax bill was too nearly complete to allow time for study of the measure, and it was referred to committee.

Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks			U	0
Industrial	95.8	95.3	88.0	97.6
Railroad	29.6	30.0	27.3	28.5
Utility	34.2	34.7	30.7	41.8
Bonds				
Industrial	111.2	110.6	109.6	105.2
Railroad	87.7	87.9	86.8	84.7
Utility	107.4	107.1	106.3	107.1
U. S. Govt		110.0	110.1	112.0

Data: Standard & Poor's Corp. except for government bonds which are from the Federal Reserve Bank of New York.

COMMON STOCKS - A WEEKLY RECORD



on coupon clearing they will have to cut down on service to regular customers.

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• Partial to the Idea-In spite of these worries most bankers like the rationbanking idea. All of them are sure that hanks can handle the coupon swapping more smoothly and efficiently than amateur local boards. Also, their participation is good advertising, and in the long run the system may put them in touch with a lot of potential new customers.

Wartime Odyssey

Elastic Stop Nut Corp. goes from New Jersey to West and thence to Wall St.-led by Abe Martin, bondman.

It's only a short bus ride from Union. N. J., to lower Manhattan, but when the Elastic Stop Nut Corp. made the trip to Wall Street, it went by way of Lincoln, Neb. In the course of that trip, industry-hungry Lincoln got a war plant, and Elastic Stop Nut floated a \$2,500,000 issue of preferred stock-an eye catching stunt for a company that cleared less than \$500,000 a year before

· Aircraft Customers-Elastic stop nuts, as securities dealers learned this week, are little nuts with a set-in washer that keeps them from flying off when hitched to a vibrating part. They are particularly useful in airplanes, but almost all machinery manufacturers find them handy.

Before the war Elastic Stop Nut Corp. did a growing but unspectacular business at its Union (N. J.) plant. In 1939 it grossed \$1,322,000; the year before, \$621,000. It had about \$389,000 worth of common stock outstanding, a healthy surplus, and no funded debt.

• Sales Skyrocket-War production blew up the company's business astronomically. In 1940, it did just under \$4,000,-000 worth of business. In the first eleven months of 1941, gross sales came to \$12,078,000. In the nine months ended last August, they were \$18,151,000.

For a while, Elastic Stop Nut made its old facilities do the job, but as orders piled up, it started looking for new space. In May, 1940, it moved to a new plant in Union, making a deal with Defense Plant Corp. to provide part of the machinery. Early this year it started hunting for a branch plant site in the

26

MEEK

• Big Abe Takes a Hand-By last spring it had decided that the Kansas City area looked nice, and it was hunting for the right site. Then ponderous Bennett S. (Abe) Martin, vice president of the First Trust Co. of Lincoln, heard the story. Martin's specialty is municipal bonds, but that didn't keep him from recognizing an opportunity for his home town



IRON WORKS COMPANY

CLEVELAND, OHIO

MEANS HIGH GEAR IN WAR PRODUCTION, TOO!

· Winning this war depends on our arms building race against time. We can't win with war industries moving in first or second gear. Armament must roll out in three shifts-high gear-in all war plants.

Van Dorn had a head start in getting into "high" on war output. We began building armor plate in 1939 and were soon on a total war production basis. Then, we adopted a three-shift schedule-to build more aircraft armor, gun shields and tank armor that guard our fighters.

And Van Dorn workers have heartily accepted their responsibility in our armor building race. They know the importance of their products to our fighting men, too, from communiques citing its performance in combat. So, they're working at top speed 24 hours a day until a decisive Victory is won.

DESIGNERS AND BUILDERS OF PRISON EQUIPMENT SINCE 1878



Today every executive is alert to the necessity of better techniques in dealing with others for the furtherance of the common objective. Here is a new special edition of this sound and stimulating manual for every man who wants to improve his methods of getting along with others.

The Technique of **EXECUTIVE CONTROL**

Shows how to deal with problems of:

By ERWIN H. SCHELL, Professor of Business Management, Massachusetts Institute of Technology Price, only \$2.00

-responsibility

discipline executive stimulation constructiveness

-self-assertion and self-expression -leadership

-justice -analysis of labor require-

-introduction of the new employee -difficulties with subordi-

mates

-opposition -stubborness

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AMERICAN TRUCKING ASSOCIATIONS10	LEHIGH PORTLAND CEMENT CO
Agency-THE BIOW CO., INC.	Agency—GRARS-MARSTON, INC. LYON METAL PRODUCTS, INC2nd Cover
Agency—Till Blow Co., INC. AMERICAN VISCOSE CORF	APONEY-LYANG ASSOCIATES, INC.
Agency—JOHN STOYBE CO.	MAINE DEVELOPMENT COMMISSION 36
ANHEUSER-BUSCH Agency—D'ABCT ADVERTISING CO.	THE MARINE MIDLAND TRUST CO OF
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Agency—Luo Burnett Co., Inc. 42	
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Agency-G. M. BASFORD CO.	Agency J. R. HAMILTON ADV. AGENCY THE MILLER CO
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BANKERS TRUST CO	MONSANTO CHEMICAL CO 4th Cover
Agency—Cowan & DENGLER, INC. THE C. O. BARTLETT & SNOW CO	MUEHLHAUSEN SPRING CORP22
Agency-HENRY T. BOURNE ADVERTISING	Agency-Carter, Jones and Taylor
AGENCY BELL & HOWELL CO	POUNDRY CO
Agency—HENRI, HURST & McDONALD, INC. BOHN ALUMINUM AND BRASS CO35	AGENCH BAYTHER END CO.
Agoney—ZIMMER-RELLIN, THO. BUSINESS PUBLISHERS INTERNATIONAL	NATIONAL CARBON CO., INC
	NORTON CO
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THE CELOTEX CORP	OPERADIO MFG. CO
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C. P. CLARE & CO	JOHN OSTER MFG. CO
AGENCY	PHILLIPS SCREW MANUFACTURERS27
THE COLSON CORP54 Agency—Merrhans, Inc.	Agency—JAMBS THOMAS CHIRURG CO. ROCHESTER ROPES, INC
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Agency-Inving J. ROBBNBLOOM ADVERTISING CO.	JOSEPH T. RYERSON & SON, INC
Agency-McCann-Endeson, Inc. 49	SANDERSON & PORTER
DOW CHEMICAL CO51	Agency—Calkins & Holden SHELL OIL CO
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Approps—MCGANN-ERICEBON, IRC. DOW CHEMICAL CO	SPRIESCH TOOL & MANUFACTURING CO., INC
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FAIRBANKS, MORSE & CO	PUBLICITY40
Agency—HENRI, HURST & MCDONALD, 180. FLEUR-O-LIER MANUFACTURERS	Agency-Sidener and Van Riper, Inc.
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Agmey—G. M. BARFORD CO. GENERAL ELECTRIC CO	Agency-J. M. MATHES, INC.
Agency-Batten, Barton, Dunsting &	Agency—BORRLL & JACOBS, INC. 93
GENERAL TIRE & RUBBER CO70, 71	Agency—BORRLL & JACOBS, INC. UNIVERSAL ATLAS CEMENT CO
Accres D'ARCY ADVERTISING CO.	
GOODYEAR TIRE & RUBBER CO., INC	THE VAN DORN IRON WORKS CO
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THE HALOID CO	THE WEATHERHEAD CO
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when he saw it. War industry, for one reason or another, had largely bypassc. Lincoln in its search for new plant sites. And although the Nebraska capital has never been a big industry spot, it wants a place at least on the tailboard of the war production bandwagon.

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For a month or more last spring, Martin flew back and forth between Union and Lincoln, piling up a mass of evidence on the superiority of Nebraska weather, Nebraska workers, Nebraska real estate. By June he had sold Nebraska to Elastic Stop Nut, and Lincoln had a new war industry.

• Already in Operation—The company bought a building costing \$485,000, put some \$325,000 of its own money into machinery, and arranged with Defense Plant Corp. for additional equipment financing. Partial operations began at Lincoln on Oct. 1.

That wasn't all Elastic Stop Nut got out of its Nebraska trip. When it appeared in Wall Street this week with \$2,500,000 worth of preferred, First Trust of Lincoln was in with three big city underwriters. White, Weld & Co. headed the syndicate with Shields & Co. and H. M. Byllesby & Co. coming in for 25% each. But Abe Martin's First Trust Co. of Lincoln underwrote 15% of the issue.

"WAR CONFERENCE"

They didn't even call it a convention. just a conference, when the Investment Bankers Association gathered this week. It was held in New York (where the preponderance of members do business, to save transportation) instead of in Hollywood, Fla.; it was compressed into two days instead of the usual five. And there was but one real theme: From the opening speech of the retiring president, John Fleek, to the inaugural of his successor, Jay N. Whipple, they talked of the investment banker's part in war finance. They even chose for their speakers men who could tell them how to help win the war-Daniel W. Bell to speak on Treasury finance, Admiral Land on the Services' programs, and former Ambassador Joseph C. Grew on the war itself.

A BILLION FOR WAR

After studying details of General Motors' new \$1,000,000,000 line of credit (BW-Sep.19'42,p98), bankers are hoping that it will serve as a pattern for a lot of war financing.

About 400 banks will participate in the loan, so that nobody has to go out too far on a limb. Government guarantees give lenders increasing protection as the amount of borrowing goes up. If G.M. uses \$250,000,000 of its credit, the government stands back of 50%. At \$500,000,000 it covers 75%, and above \$650,000,000 it guarantees 90%.

THE TRADING POST

Work or Fight?

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Now that the high command has iven the go-ahead on drafting the teene men for the army, a situation alady bad (BW-Sept.12'42,p44) promes to get worse.

Last week I found the aircraft prouction centers of the Pacific Coast ceply concerned over the inroads of e armed services on their essential ersonnel and the resultant effects on oth efficiency and morale. In some narters it seemed to be the number ne problem of those who are laboring get out the planes required by those ne armed services.

When we began to prepare for this par it was common talk that modern at is industrial war and that the workhops of industry must be looked upon a fourth front, just as vital to victory those of the land, the sea, and the r. So we set up our selective service roject to conserve our industrial manower while we undertook to raise the

iggest armies ever. Until recently things seemed to go airly well. But now, as we get down ward the bottom of the bin, there are gns that our progress may have passed he point where our draft board arrange-

nent can function effectively. In some Pacific Coast cities I enountered considerable comment to the ffect that in large Eastern cities heavy eferments were being made despite auch unemployment, while Coast cities ith important war industries were led white to meet their quotas. I reall such a criticism by an industrial ecutive who is a member of a local raft board and who had just returned om a trip east to get a first-hand view the manpower situation.

One case, I am told, is typical of any. About a year ago three mechanes left a small town in the Middle West nd went out to the Pacific Coast. There they took jobs in an aircraft lant. After considerable training they

ow are foremen in key positions.

Meanwhile the draft board in the d home town has been having tough ledding to meet its quota. Recently had to raise three more men. So it pided domestic complications by fering up its errant trio. That was n easy out, since, under the present etup, the men still are under its juris-

How this case will come out I don't now. The men are valuable workers, nd already the heads of the two airraft companies by which they are em-loyed have made personal appeals to the local boards involved. Army Air orce officers have added their pleas.

But the local boards are in the driver's seat, and a Pacific Coast factory may seem very remote when they are faced with the alternative of sending off some home-town boys.

The reduction in the draft ages is not likely to improve matters. The draft authorities, both local and national, may well shrink from exempting single and childless grownups on occupational grounds while they are taking the youthful sons of their friends, neighbors, and kinfolks. That is, matters are not likely to improve unless the draft officials are willing to throw a substantial measure of insight and backbone into their assignment.

The cold fact is that, if we are to maintain our production of aircraft and other weapons of war, we shall have to retain the necessary skilled, and experienced manpower for that purpose, without regard to marital state or parenthood. There is no use at all in raising a vast army if we cannot arm it. Already a move is on to withdraw some essential miners from the army ranks to put them back producing badly needed metals. Why go through all that in other industries when we can see it coming?

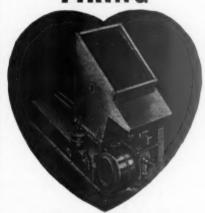
It is true, of course, that more and more women must replace the men who are needed for the armed forces. But to do that we must retain now in each plant the key technicians and others who will be required to train and direct the new workers of both sexes. Wholesale exemption of everyone working in a war plant would not be in order. But if we are not to hamstring the armed forces in our zeal to recruit them, we shall need intelligent discrimination.

That is where the shoe pinches. The easy course for draft authorities is to pass that one up. If they decline to exercise that discrimination, they can avoid the risk of criticism for alleged favoritism to individuals or industries. But that would ignore the fact that war is an affair of risks of many kinds for many people.

If this hurdle should be too high for local authorities, perhaps the heat should be taken off them and assumed directly by the Army. Connected with almost every war plant there is some army officer who should be competent to decide whether Joe Doakes is more valuable to the Army in the ranks or at his workbench.

After all, the question concerns the ability of the Army to perform its mission; someone in the Army should have the guts to deal with it. And unless it is dealt with very soon by some such method, we may find that unit cation of individuals to work or fight is carner. W.C. method, we may find that universal allo-

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While Iron Fireman's own plants are chiefly busy making precision parts for many war products, Iron Fireman stokers are being manufactured for plants engaged in war work; and to convert boiler plants from other fuels to coal firing. Iron Fireman stokers are made in underfeed models, as shown, and pneumatic bunker feed. Capacities of single units up to 1,000 h.p. Larger capacities with multiple installations. If you are faced with fuel changes or increased steam demands, write Iron Fireman Manufacturing Company, 3281 West 106th Street, Cleveland, Ohio. Plants at Portland, Ore.; Cleveland, Ohio; Toronto, Canada.



THE TREND

THE TREASURY DECLARES A POLICY

By ordinary standards the Treasury's October financing got the coolest reception of any government offering since 1933, but that doesn't mean that Secretary Morgenthau fumbled his play. The Treasury wasn't making an ordinary trip to the money market when it offered \$4,000,000,000 worth of bonds and notes on Oct. 8. It was declaring a policy, backed by a show of strength. It didn't expect investors to be particularly enthusiastic about the terms it set.

In deciding to issue 2% bonds and 1½% notes, Secretary Morgenthau overrode bankers who advised him that the major part of the new offering should carry a 2½ coupon. In effect, he told the banks to take 2% and like it. At his next press conference he followed up the implied ultimatum by stating flatly that the Treasury was not going to offer banks anything more than a 2% bond with seven to ten years maturity.

• Thus the Treasury established another benchmark on the scale of interest rates it intends to pay on war borrowing. It has already set 2½% as the outside rate on its long-term bonds. The reserve banks' standing offer to buy bills at 3/8 puts a ceiling on the short-term rate. Now that it has fixed the medium rate at 2%, the Treasury has its pattern of interest rates pretty well roughed out.

In previous wars the Treasury wasn't able to tell the market what it would pay on money it borrowed. The market told the Treasury. As Secretary Morgenthau pointed out, the first Liberty Loan paid 3½%; the second paid 4%, and the final Victory Loan 4½%.

In the last war the government hadn't had much experience with monetary control, and it failed to realize just how much pressure it could put on the market. The reserve banks, then only a few years old, had to feel their way and watch out for their gold reserves.

• Now government authorities have all the power they need to make their program stick—at least for the time being. The Federal Reserve Board can keep money markets easy by supplying banks with any additional reserves they need to buy up new issues. The commercial banks will do as they are told as long as their reserve position is protected. Most of them will act out of patriotism; those that don't will see the light after a discreet talk from their reserve bank. If the market wobbles temporarily, the open market committee can always support it with direct buying.

Ever since the Federal Reserve system was established, the Treasury has been able to call on the commercial banks to help it out of a tight spot. In 1931, Secretary Andrew Mellon did some hasty telephoning on at least two occasions when his offerings were about to get a snub from the market.

The distinguishing feature of present policy is that

the Treasury expects the banks to back its play all the time. It no longer waits until it is in a hole before it calls for their help.

• When it puts banks in this position, the Treasury has to take responsibility for protecting them against lossed on the government securities they buy. In other word, if it lays down a portfolio policy for banks, it has to see that they don't endanger liquidity in cooperating.

Hence, Secretary Morgenthau has two big reasons for wanting to establish a stable scale of interest rates in the market for governments. First, he wants to keep on getting money cheap instead of paying successively higher prices as the Treasury did in the last war. Second, he wants to keep prices of outstanding securities at par so that any bank that needs cash can liquidate its portfolio without standing a loss.

Banks have been taking this for granted ever since war financing got under way, but even so, many of them didn't like the looks of the policy Secretary Morgenthal laid down in his October financing. Metropolitan bankers had advised a 2½% bond because they thought it would attract more private investors. They didn't want the Treasury to shove another issue at them when they were still digesting the August flotation of \$3,000,000,000 in notes and certificates.

• Country bankers, with fewer worries about liquidity, usually prefer a higher yield even if that means taking a longer maturity than the city banks consider comfortable. They were disgruntled to hear that the Treasury intends to limit them to 2%, reserving higher rates for issues aimed at private investors.

Moreover, banks of both classes thought the Treasury drove a hard bargain in pricing its issue. In the past, particularly before the war, the Treasury customarily set rates and maturities of a new issue so that it would go to a premium as soon as it came out. This time Secretary Morgenthau stretched his maturity to March, 1952, in spite of the fact that an outstanding issue of 2's, due December, 1951, was selling only fractionally above par. Bankers commented irritably on this business of "skinning a louse for its hide and tallow," but the Treasury apparently thinks that when it has taken on the obligation of supporting its bonds at par, there is no reason why it should give buyers the extra protection of a premium.

• All in all, it isn't surprising that the market sputtered a little as it swallowed the October issues. The significant thing is that the Treasury established its policy in spite of the market's protest. Later on it may run into trouble, but for the present it is calling its shots without contradiction.

The Editors of Business Week

Business Week • October 24, 1942

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